

ENVIRONMENT

From the above conversation you understand that the place, people, things and nature that surround any living organism is called environment. It is a combination of natural and human made phenomena. While the natural environment refers to both biotic and abiotic conditions existing on the earth, human environment reveals the activities, creations and interactions among human being.

The Environment (Protection) Act

- The Environment (Protection) Act, 1986 not only has important constitutional implications but also an international background. The spirit of the proclamation adopted by the United Nations Conference on Human Environment, held in Stockholm in June 1972, was implemented by the Government of India by creating this Act.
- Although there were several existing laws that dealt directly or indirectly with environmental issues it was necessary to have a general legislation for environmental protection because the existing laws focused on very specific types of pollution, or specific categories of hazardous substances, or were indirectly related to the environment through laws that control landuse, protect our national parks and sanctuaries and our wildlife. However, there was no overarching legislation and certain areas of environmental hazards were not covered.
- There were also gaps in areas that were potential environmental hazards and there were several inadequate links in handling matters of industrial and environmental safety.
- This was essentially related to the multiplicity of regulatory agencies. Thus, there was a need for an authority to study, plan and implement the long-term requirements of environmental

safety, and direct and coordinate a system of appropriate response to emergencies threatening the environment.

- This Act was thus passed to protect the environment, as there was a growing concern over the deteriorating state of the environment.
- As impacts grew considerably environmental protection became a national priority in the 1970s. While the wider general legislation to protect our environment is now in place, it has become increasingly evident that our environmental situation continues to deteriorate. We need to implement this Act much more aggressively if our environment is to be protected.
- The presence of excessive concentrations of harmful chemicals in the atmosphere and aquatic ecosystems leads to the disruption of food chains and a loss of species.
- Public concern and support is crucial for implementing the EPA.
- This must be supported by an enlightened media, good administrators, highly aware policy makers, informed judiciary and trained technocrats who together can influence and prevent further degradation of our environment. Each of us has a responsibility to make this happen.

The Air (Prevention and Control of Pollution) Act

- The Government passed this Act in 1981 to clean up our air by controlling pollution.
- It states that sources of air pollution such as industry, vehicles, power plants, etc., are not permitted to release particulate matter, lead, carbon monoxide, sulphur dioxide, nitrogen oxide, volatile organic compounds (VOCs) or other toxic substances beyond a prescribed level. To ensure this, Pollution control

Boards (PCBs) have been set up by Government to measure pollution levels in the atmosphere and at certain sources by testing the air.

- This is measured in parts per million or in milligrams or micrograms per cubic meter.
- The particulate matter and gases that are released by industry and by cars, buses and two wheelers is measured by using air-sampling equipment.
- However, the most important aspect is for people themselves to appreciate the dangers of air pollution and reduce their own potential as polluters by seeing that their own vehicles or the industry they work in reduces levels of emissions.

This Act is created 'to take appropriate steps for the preservation of the natural resources of the Earth which among other things includes the preservation of high quality air and ensures controlling the level of air pollution. The main objectives of the Act are as follows:

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

Air pollution is more acute in heavily industrialized and urbanized areas, which are also densely populated. The presence of pollution beyond certain limits due to various pollutants discharged through industrial emission is monitored by the PCBs set up in every state.

What can an individual do to control air pollution?

- 1) When you see a polluting vehicle, take down the number and send a letter to the Road Transport Office (RTO) and the PCB.
- 2) If you observe an industry polluting air, inform the PCB in writing and ascertain if action is taken.

- 3) Use cars only when absolutely necessary; walk or cycle as much as possible instead of using fossil fuel-powered vehicles.
- 4) Use public transport as far as possible, as more people can travel in a single large vehicle rather than using multiple small vehicles which add to pollution.
- 5) Share a vehicle space with relatives and friends; carpools minimize the use of fossil fuels
- 6) Do not use air fresheners and other aerosols and sprays which contain CFCs that deplete the ozone layer.
- 7) Do not smoke in a public place. It is illegal and endangers not only your own health but also that of others.

It is a citizen's duty to report to the local authorities such as the Collector, the PCB, and the press about offences made by a polluter so that action can be taken against the offender. It is equally important to prevent and report to the authorities on cutting down of trees, as this reduces nature's ability to maintain the carbon dioxide and oxygen levels. Preventing air pollution and preserving the quality of our air is a responsibility that each individual must support so that we can breathe clean air.

The Water (Prevention and Control of Pollution) Act

The Government formulated this Act in 1974 to prevent the pollution of water by industrial, agricultural and household wastewater that can contaminate our water sources.

- Wastewaters with high levels of pollutants that enter wetlands, rivers, lakes, wells as well as the sea are serious health hazards.
- Controlling the point sources by monitoring levels of different pollutants is one way to prevent pollution, by punishing the polluter.
- Individuals can also do several things to reduce water pollution such as using biodegradable chemicals for household use, reducing the use of

pesticides in gardens, and identifying polluting sources at workplaces and in industrial units where oil or other petroleum products and heavy metals are used.

- Excessive organic matter, sediments and infecting organisms from hospital wastes can also pollute our water. Citizens need to develop a watchdog force to inform authorities to take appropriate actions against different types of water pollution.
- The main objectives of the Water Act are to provide for prevention, control and abatement of water pollution and the maintenance or restoration of the wholesomeness of water. It is designed to assess pollution levels and punish polluters.
- The Central Government and State Governments have set up PCBs to monitor water pollution.

What can individuals do to prevent water pollution?

1. Inform the PCB of any offender who is polluting water and ensure that appropriate action is taken. One can also write to the press.
2. Do not dump wastes into a household or industrial drain which can directly enter any water body, such as a stream, river, pond, lake or the sea.
3. Do not use toilets for flushing down waste items as they do not disappear but reappear at other places and cause water pollution.
4. Use compost instead of chemical fertilizers in gardens.
5. Avoid the use of pesticides at home like DDT, Malathion, Aldrin, and use alternative methods like a paste of boric acid mixed with gram flour to kill cockroaches and other insects. Use dried neem leaves to help keep away insects.

The Wildlife Protection Act

This Act, passed in 1972, deals with the declaration of National Parks and Wildlife Sanctuaries and their notification.

- It establishes the structure of the State's wildlife management and the posts designated for Wildlife Management. It provides for setting up Wildlife Advisory Boards.
- It prohibits hunting of all animals specified in Schedules I to IV of the Act. These are notified in order of their danger of extinction. Plants that are protected are included in Schedule VI.
- The Amendment to the Wildlife Protection Act in 2002 is more stringent and prevents the commercial use of resources by local people.
- It has brought in new concepts such as the creation of Community Reserves.
- It has also altered several definitions. For instance, under animals, fish are now included. Forest produce has been redefined to ensure the protection of ecosystems.
- While there are several changes, the new Act still has serious issues concerned with its implementation. Laws are only as good as the ones that can be enforced.
- The Act is expected to deter people from breaking the law. However, there are serious problems due to poaching.
- One cannot expect to use the Act to reduce this without increasing Forest Staff, providing weapons, jeeps, radio equipment, etc., to establish a strong deterrent force.

What can an individual do?

- 1) If you observe an act of poaching, or see a poached animal, inform the local Forest Department Official at the highest possible level. One can also report the event through the press.
- 2) Say 'no' to the use of wildlife products and also try to convince other people not to buy them.
- 3) Reduce the use of wood and wood products wherever possible.
- 4) Avoid misuse of paper because it is made from bamboo and wood, which

- destroys wildlife habitat. Paper and envelopes can always be reused.
- 5) Do not harm animals, and dissuade others from inflicting cruelty to animals.
 - 6) Do not disturb birds' nests and fledglings.
 - 7) If you come across an injured animal, do what you can to help it.
 - 8) If the animal needs medical care and expert attention contact the Society for the Prevention of Cruelty to Animals (SPCA) or Blue Cross in your city.
 - 9) Create awareness about biodiversity conservation in your own way to family and friends.

Forest Conservation Act

To appreciate the importance of the Forest Conservation Act of 1980, which was amended in 1988, it is essential to understand its historical background.

- The Indian Forest Act of 1927 consolidated all the previous laws regarding forests that were passed before the 1920s.
- The Act gave the Government and Forest Department the power to create Reserved Forests, and the right to use Reserved Forests for Government use alone.
- It also created Protected Forests, in which the use of resources by local people was controlled.
- Some forests were to be controlled by the village community, and these were called Village Forests.
- The Act remained in force till the 1980s when it was realised that protecting forests for timber production alone was not acceptable.
- The other values of protecting the services that forests provide and its valuable assets such as biodiversity began to overshadow the importance of their revenue earnings from timber.
- Thus a new Act was essential. This led to the Forest Conservation Act of 1980 and its amendment in 1988.
- India's first Forest Policy was enunciated in 1952. Between 1952 and 1988, the extent of deforestation was so great that it became essential to formulate a new policy on forests and their utilization.
- The earlier forest policies had focused only on revenue generation.
- In the 1980s it became clear that forests must be protected for their other functions such as the maintenance of soil and water regimes centered around ecological concerns.
- It also provided for the use of goods and services of the forest for its local inhabitants.
- The new policy framework made conversion of forests into other much less possible. Conservation of the forests as a natural heritage finds a place in the new policy, which includes the preservation of its biological diversity and genetic resources.
- It also values meeting the needs of local people for food, fuelwood, fodder and NTFPs. It gives priority to maintaining environmental stability and ecological balance.
- It expressly states that the network of protected Areas should be strengthened and extended.
- In 1992, the 73rd and 74th Amendments to the Constitution furthered governance through panchayats.
- They allow the states to invest the local panchayats with the authority to manage local forest resources.
- The Forest conservation Act of 1980 was enacted to control deforestation. It ensured that forestlands could not de-reserve without prior approval of the Central Government.
- This was created as some states had begun to de-reserve the Reserved Forests for non-forest use. These

states had regularized encroachments and resettled 'Project Affected People' from development projects such as dams in these de-reserved areas.

- The need for a new legislation became urgent. The Act made it possible to retain a greater control over the frightening level of deforestation in the country and specified penalties for offenders.

What can an individual do to support the Act?

- 1) Be alert to destructive activities in your local green areas such as Reserved Forests and Protected Forests, and in Protected Areas (national parks and wildlife sanctuaries). Report any such act to the Forest Department as well as the Press. Reports of violations can be made to the Conservator of Forest, District Forest Officer, Range Forest Officer, Forest Guard or the District Commissioner, or local civic body.
- 2) Acquaint yourself with the laws, detailed rules and orders issued by the Government.
- 3) Create awareness about the existence and value of national parks and sanctuaries and build up a public opinion against illegal activities in the forest or disturbance to wildlife.
- 4) Pressurize the authorities to implement the forest and wildlife laws and rules to protect green areas.
- 5) Take legal action if necessary and if possible through a Public Interest Litigation (PIL) against the offending party. Use the help of NGOs who can undertake legal action.
- 6) Help to create public pressure to change rules, laws and procedures when necessary.
- 7) Use better, ecologically sensitive public transport and bicycle tracks. Do not litter in a forest area.
- 8) Participate in preservation of greenery, by planting, watering and caring for plants.

Public awareness

- Environmental sensitivity in our country can only grow through a major public awareness campaign.
- This has several tools-the electronic media, the press, school and college education, adult education, which are all essentially complementary to each other.
- Green movements can grow out of small local initiatives to become major players in advocating environmental protection to the Government.
- Policy makers will only work towards environmental preservation if there is a sufficiently large bank of voters that insist on protecting the environment.
- Orienting the media to project pro-environmental issues is an important aspect.
- Several advertising campaigns frequently have messages that are negative to environmental preservation.

Using an environmental calendar of activities

There are several days of special environmental significance, which can be celebrated in the community and can be used for creating environmental awareness.

February 2: World Wetland Day is celebrated to create awareness about wetlands and their value to mankind. On February 2nd 1971, the Ramsar Convention on Wetlands of International importance was signed at Ramsar in Iran. You can initiate a campaign for the proper use and maintenance of wetlands in the vicinity of your city or village.

March 21: World Forestry Day can be used to initiate a public awareness campaign about the extremely rapid disappearance of our forests. The program must be action-oriented and become an ongoing process with activities such as tree plantation.

April 7: World Health Day-The World Health Organisation (WHO) came into existence on this day in 1948. A campaign for personal sanitation and hygiene to understanding

issues of public health, occupational health, etc., can be carried out. Topics that deal with environment-related diseases and their spread can be discussed and preventive measures suggested.

April 18: World Heritage Day can be used to arrange a visit to a local fort or museum. Environment also includes our cultural moments. Students could use this opportunity to create awareness among the local people about their very valuable heritage sites.

April 22: Earth Day was first celebrated in 1970 by a group of people in the USA to draw attention to increasing environmental problems caused by humans on Earth. This day is now celebrated all over the world with rallies, festivals, clean-ups, special shows and lectures.

June 5: World Environment Day marks the anniversary of the Stockholm Conference on Human Environment in Sweden in 1972, where nations of the world gathered to share their concern over human progress at the expense of the environment.

June 11: World Population Day is a day when the vital link between population and environment could be discussed in seminars held at college and other NGOs

August 6: Hiroshima Day could be used to discuss our own Bhopal Gas Tragedy and the Chernobyl disaster.

September 16: World Ozone Day was proclaimed by the United Nations as the International Day for the preservation of the ozone layer. This is a good occasion for students to find out more about the threats to this layer and initiate discussions on what they can do to help mitigate this global threat. The day marks the Montreal Protocol signed in 1987 to control the production and consumption of ozone-depleting substances.

September 28: Green Consumer Day could be used to create awareness among consumers about various products. Students could talk to

shopkeepers and consumers about excess packaging and a campaign to use articles which are not heavily packaged could be carried out.

October 1-7: Wildlife Week can consist of seminars on conserving our species and threatened ecosystems. A poster display or a street play to highlight India's rich biodiversity can be planned. Wildlife does not only mean animals, but includes plants as well.

