

**ENVIRONMENT & ECOLOGY**

**BAS104/204**

**UNIT-5**

**POWERPOINT PRESENTATION**

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# **AKTU BAS104 / BAS204: ENVIRONMENT AND ECOLOGY SYLLABUS**

## **Unit-5:**

**Environmental Protection;** Environmental Protection Act 1986, Initiatives by Non Governmental Organizations (NGO's),

**Human Population and the Environment:** Population growth, Environmental Education, Women Education.

# LECTURE-27:

## ENVIRONMENTAL (PROTECTION) ACT, 1986

- The Environment (Protection) Act is the most important Act in the context of environmental management and was passed by the Parliament in the year 1986.
- The genesis of Environment (Protection) Act is in the Article 48A and Article 51A(g) of the Indian Constitution.
- This Act empowers the Central Government to prevent, control and abate environmental pollution.
- This Act is also called “UMBRELLA ACT” as this Act ensures enforcement of several Acts/regulations concerning Prevention & Control of Environmental Pollution and also Environmental Protection/Safety. The Central Government or any other person duly Authorized is empowered to collect the samples of air, water, soil or other substances as evidence of offences under the Environment (Protection) Act, 1986.

# LECTURE-27: ENVIRONMENTAL (PROTECTION) ACT, 1986.....

## OBJECTIVES:

- Protection and improvement of environment.
- Prevention of hazards of all living creatures and property.
- Maintenance of harmonious relationship between humans and their environment.

## DEFINITIONS (IMPORTANT TERMS USED IN THE ACT):

Environment:

Environmental pollutant:

Environmental pollution:

Hazardous substance:

# LECTURE-27: ENVIRONMENTAL (PROTECTION) ACT, 1986.....

## SALIENT FEATURES:

- This Act empowers the Central Government to prevent, control and abate environmental pollution.
- The Act empowers the Central Government to make rules for the-
  - Standard of quality of air, water and soil for various areas and for various purposes.
  - Maximum permissible limits of concentration for various environmental pollutants (including noise) for different areas.
- This Act is also called “UMBRELLA ACT” as this Act ensures enforcement of several Acts/regulations concerning Prevention & Control of Environmental Pollution and also Environmental Protection/Safety. The Central Government or any other person duly Authorized is empowered to collect the samples of air, water, soil or other substances as evidence of offences under the Environment (Protection) Act, 1986.

# LECTURE-27: ENVIRONMENTAL (PROTECTION) ACT, 1986.....

## PUNISHMENT AND PENALTY:

- Any person violating any of the provisions of the Act shall be punished with IMPRISONMENT UP TO FIVE YEARS OR A FINE UP TO 1 LAKH RUPEES OR BOTH.
- In case the violation continues beyond a period of one year, the offender/defaulters shall be punishable with the IMPRISONMENT FOR SEVEN YEARS.

## LECTURE-28:

# ROLE OF GOVERNMENT, NGO'S & INDIVIDUALS IN ENVIRONMENTAL PROTECTION

There is a provision in the constitution of India in favour of protection and improvement of environment. Our constitution reads- *“It is the duty of the Government to protect and improvement the environment and to safeguard forests and wildlife of the country”*.

In this regard Government of India has constituted Central and State Pollution Control Boards (CPCB/SPCB) and enacted a number of rules and regulations for protecting the environment.

# LECTURE-28:

## ROLE OF GOVERNMENT, NGO'S & INDIVIDUALS IN ENVIRONMENTAL PROTECTION.....

NAME OF ACT/POLICY	FUNCTIONS
The Wildlife (Protection) Act, 1972	Deals with the protection of wildlife in the country.
The Water (Prevention and Control of Pollution) Act, 1974	Deals with the preservation of water quality and control of water pollution.
The Air (Prevention and Control of Pollution) Act, 1981	Deals with the preservation of quality of air and control of air pollution.
The Forest (Conservation) Act, 1980	Deals with the conservation of forests.
National Forest Policy, 1988	Deals with the conservation of forests.
The Environmental Protection Act, 1986	Deals with the protection of air, water and soil quality and control of environmental pollution.



# LECTURE-28: ROLE OF GOVERNMENT, NGO'S & INDIVIDUALS IN ENVIRONMENTAL PROTECTION.....

## SALIENT FEATURES OF AIR ACT, 1981

Air Act means: Air (Prevention and Control of Pollution) Act, 1981. This Act was amended in 1987. This act was passed by the Government in 1981 to regulate and control of air pollution.

### OBJECTIVES:

- Prevention, control and abatement of air pollution
- Maintaining the quality of air; and
- Establishment of Boards for the prevention and control of air pollution.

**LECTURE-28:**  
**ROLE OF GOVERNMENT, NGO'S & INDIVIDUALS**  
**IN ENVIRONMENTAL PROTECTION.....**

**SALIENT FEATURES OF AIR ACT, 1981...**

**DEFINITIONS (IMPORTANT TERMS USED IN THE ACT):**

**a) AIR POLLUTION:**

**b) AIR POLLUTANT:**

**c) CONTROL EQUIPMENTS:**

**d) BOARD: Board means Central Pollution Control Board (CPCB) and State Pollution Control Board (SPCB).**

# **LECTURE-28:** **ROLE OF GOVERNMENT, NGO'S & INDIVIDUALS** **IN ENVIRONMENTAL PROTECTION.....**

## **SALIENT FEATURES OF AIR ACT, 1981...**

### **SALIENT FEATURES:**

**CONSTRUCTION (ESTABLISHMENT) OF CENTRAL AND STATE POLLUTION CONTROL BOARDS:** The Central and State Boards for the prevention and control of air pollution (i.e., CPCB & SPCB) have been set up to monitor the emissions from polluting agents.

### **PUNISHMENT AND PENALTIES:**

Defaulter shall be punished with imprisonment of **THREE MONTHS** or a fine of **10,000 RUPEES** or **BOTH**.

# **LECTURE-28:**

## **ROLE OF GOVERNMENT, NGO'S & INDIVIDUALS** **IN ENVIRONMENTAL PROTECTION.....**

### **SALIENT FEATURES OF WATER ACT, 1974**

**Water Act means:** Water (Prevention and Control of Pollution) Act, 1974. This Act was amended in 1988.

This act was passed by the Government in 1974 to regulate and control of water pollution by industrial, agricultural and municipal effluents.

#### **OBJECTIVES:**

- Prevention, control and abatement of water pollution
- Maintaining the quality of water; and
- Establishment of Boards for the prevention and control of water pollution.

**LECTURE-28:**  
**ROLE OF GOVERNMENT, NGO'S & INDIVIDUALS IN ENVIRONMENTAL PROTECTION.....**

**SALIENT FEATURES OF WATER ACT, 1974....**

**DEFINITIONS (IMPORTANT TERMS USED IN THE ACT):**

- a) WATER POLLUTION:
- b) WATER POLLUTANT:
- c) BOARD: Board means Central Pollution Control Board (CPCB) and State Pollution Control Board (SPCB).

**SALIENT FEATURES:**

- CONSTRUCTION (ESTABLISHMENT) OF CENTRAL AND STATE POLLUTION CONTROL BOARDS: The Central and State Boards for the prevention and control of water pollution (i.e., CPCB & SPCB) have been set up to monitor the pollution of water bodies.

**PUNISHMENT AND PENALTIES:**

Defaulter shall be punished with imprisonment for THREE MONTHS or a fine of Rs 10,000 or BOTH.

**LECTURE-28:**  
**ROLE OF GOVERNMENT, NGO'S & INDIVIDUALS IN ENVIRONMENTAL PROTECTION.....**

## **SALIENT FEATURES OF FOREST ACT, 1980**

**FOREST (CONSERVATION) ACT, 1980 (AMENDED in 1988):**

**(Extends to all over India except Jammu and Kashmir)**

**OBJECTIVES:**

- Protection and conservation of forests
- To ensure judicious/proper use of forest products.

**DEFINITION:**

- **FOREST:** A biotic community, which is composed of trees, shrubs, herbs and grasses.

**SALIENT FEATURES:**

- Constitution of Advisory committee by Central Government.
- As per this Act, no forest land can be used for no-forest purposes without the prior permission of the Central Government.

**PENALTY AND PUNISHMENT:**

- Any person violating any of the provisions of the Act shall be punished with imprisonment for SIX MONTHS or A FINE OF RS 500 or BOTH.

**LECTURE-28:**  
**ROLE OF GOVERNMENT, NGO'S & INDIVIDUALS IN ENVIRONMENTAL PROTECTION.....**

**SALIENT FEATURES OF WILDLIFE ACT, 1972**

**WILDLIFE (PROTECTION) ACT, 1972  
(AMENDED IN 1983, 1986, 1991, 2002)**

The Wildlife Act was passed by Indian Parliament in 1972 to protect India's wildlife and their habitat.

**DEFINITION:**

- WILDLIFE:
- HABITAT:
- HUNTING:

**OBJECTIVES AND SALIENT FEATURES:**

- To protect the Wildlife and their habitat.
- Prohibition on hunting of specified animals
- Setting up and management of Protected Areas (such as National Parks, Wildlife Sanctuaries and Biosphere Reserves)

**PENALTY AND PUNISHMENT:**

- Any person violating any of the provisions of the Act shall be punished with imprisonment FOR THREE YEARS or WITH A FINE OF RS 25000 or BOTH.

# LECTURE-28: ROLE OF GOVERNMENT, NGO'S & INDIVIDUALS IN ENVIRONMENTAL PROTECTION.....

## ROLE OF NON-GOVERNMENTAL ORGANIZATIONS (NGOs)

**NGOs (Non-Governmental Organizations)** play a very important role in environmental education and public awareness.

The contribution of NGOs with respect to environment is as follows:

- Environmental education and environmental awareness.
- Public awareness and public participation to conserve environment.
- Conduct environmental movements (*such as Chipko Movement, Silent Valley Movement, save seed movement etc*).
- Pollution control.
- Wildlife conservation and Biodiversity conservation.
- Afforestation and reforestation programme.
- Research on flora (plants) and fauna (animals)



**LECTURE-28:**  
**ROLE OF GOVERNMENT, NGO'S & INDIVIDUALS IN**  
**ENVIRONMENTAL PROTECTION.....**

**THE ROLE OF AN INDIVIDUAL IN PROTECTION  
OF ENVIRONMENT**

Following are some of the important guidelines, which an individual can pursue (follow) to protect the environment/natural resources and in prevention of pollution.

- Try to live in such a way, which is close to nature.
- Adopt sustainable lifestyle.
- Try to use only eco-friendly products.
- Plant trees and take care of them.
- Minimize the use of substances that cause pollution.
- Try to minimize the use of fossil fuels as far as possible.
- Try to reduce, reuse and recycle the waste.
- Reduce the use of plastic bags.
- Stop smoking as smoke pollutes the home, offices and surroundings of a smoker.

# LECTURE-29: POPULATION: POPULATION & ITS CHARACTERISTICS, POPULATION GROWTH AND RELATED ASPECTS

**POPULATION:** In simple terms, population of a country or any area is the total number of people who live in it. The scientific study of population is called DEMOGRAPHY.

## **CHARACTERISTICS OR ATTRIBUTES OF POPULATION:**

Population has specific characteristics that allow it to be distinguished from one another.

For example-

- Population size (N):
- Population density:
- Birth rate (or Natality rate):
- Death rate (Mortality rate):
- Growth rate:
- Sex ratio:
- Age structure or Age distribution:
- Population equilibrium:
- Population dispersal:
- Population fluctuations:

# LECTURE-29: POPULATION: POPULATION & ITS CHARACTERISTICS, POPULATION GROWTH AND RELATED ASPECTS.....

**Population growth** refers to the net increase in the population level of any country over a period of time.

The change in population size is given by the equation-

$$N_t = N_0 + B + I - D - E$$

Where-

$N_0$ = Initial size of population

B= Birth rate

I= Immigration rate

D= Death rate

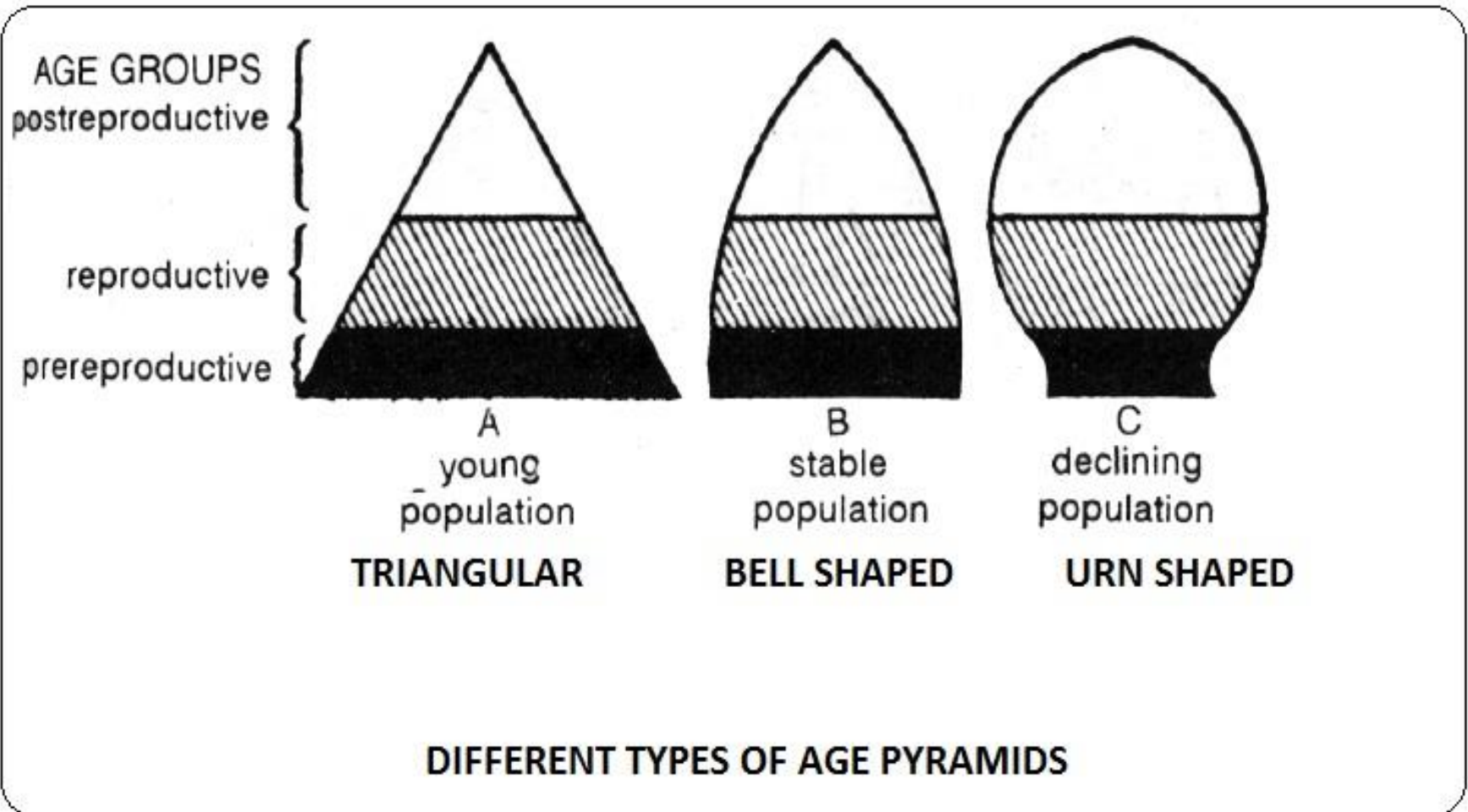
E= Emigration rate

# LECTURE-29: POPULATION: POPULATION & ITS CHARACTERISTICS, POPULATION GROWTH AND RELATED ASPECTS.....

## CHARACTERISTICS OF POPULATION GROWTH:

1. Exponential growth: This refers to the growth of population in geometric progression (i.e. 1, 2, 4, 8, 16...)
2. Doubling time: The time needed for a population to double its size at a constant annual rate is known as doubling time.
3. Age structure: In most of population, individuals are of different age, and the proportion of individuals in each age group is called age structure or age distribution. Age structure can be represented with the help of Age pyramid or Age-sex pyramid. Age pyramids are formed on the basis of people belonging to different age groups such as:
  - Pre-reproductive (0-14 years)
  - Reproductive (15-44 years)
  - Post-reproductive (45 years and above)

# LECTURE-29: POPULATION: POPULATION & ITS CHARACTERISTICS, POPULATION GROWTH AND RELATED ASPECTS.....



# LECTURE-29: POPULATION: POPULATION & ITS CHARACTERISTICS, POPULATION GROWTH AND RELATED ASPECTS.....

## POPULATION EXPLOSION:

The sudden and rapid increase of human population which crosses the growth rate of food grain in an economy is termed population explosion. Population explosion has become a serious world concern.

## POPULATION EXPLOSION IN INDIA:

India is one of the countries hit by the population explosion. India has crossed the one billion mark and is second only after china. India already has  $1/6^{\text{th}}$  of the world population, while it has only 2.5% of the earth's land. This has put a great stress on all our natural resources, which has ultimately led to the poor quality of life in our country.

# LECTURE-29: POPULATION: POPULATION & ITS CHARACTERISTICS, POPULATION GROWTH AND RELATED ASPECTS.....

## FACTORS RESPONSIBLE FOR POPULATION EXPLOSION IN INDIA

- \* Illiteracy (Most of the rural population are still illiterate, ignorant and superstitious)
- \* Traditional beliefs (like children are regarded as gift of God and a sign of prosperity)
- \* High mortality rate due to better medical facilities
- \* Economic reasons (like children are considered to be helping hands to increase the family income)
- \* Religious and social customs
- \* Lack of recreation other than sex due to poor standard of living and poverty.



# LECTURE-29: POPULATION: POPULATION & ITS CHARACTERISTICS, POPULATION GROWTH AND RELATED ASPECTS.....

## **HARMFUL EFFECTS (CONSEQUENCES) OF POPULATION EXPLOSION:**

The population explosion will result in misery (=unhappiness), poor health, increase of urban slums and decrease in per capita income (i.e., economic problems).

## **STEPS TO OVERCOME THE PROBLEM OF POPULATION EXPLOSION:**

- The concept of value education should be implemented.
- People should be made aware of the advantages of having small families and at the same time, the disadvantages of having many children.
- Shedding away the old faiths and beliefs that more the children, greater would be the earning capacity of the family.
- People should be advised to adopt family planning methods by which they can prevent pregnancy (contraception).
- There should be Legal Enactments for the people with more than a specified number of children.



# LECTURE-30: ENVIRONMENTAL EDUCATION AND NEED FOR WOMEN EDUCATION

**Environmental education** means the educational process dealing with man's relationship with his natural and man-made surroundings (environment).

## OBJECTIVES OF ENVIRONMENTAL EDUCATION:

- To promote environmental AWARENESS among all sections of the society.
- To promote environment education through existing educational/scientific/research institutions.
- To encourage Non-Governmental Organizations, mass media and other concerned organizations for promoting awareness about environmental issues among the people at all levels.

# LECTURE-30: ENVIRONMENTAL EDUCATION AND NEED FOR WOMEN EDUCATION.....

## PRINCIPLES OF ENVIRONMENTAL EDUCATION

- Environmental Education must involve everyone.
- Environmental Education must be lifelong.
- Environmental Education must be holistic .
- Environmental Education must be practical.
- Environmental Education must be in harmony with social and economic goals and accorded equal priority.
- Environmental Education must help learners to discover the real cause of environmental problems.

# LECTURE-30: ENVIRONMENTAL EDUCATION AND NEED FOR WOMEN EDUCATION.....

## TYPES OF ENVIRONMENTAL EDUCATION:

Environmental education may be-

**A. *FORMAL ENVIRONMENTAL EDUCATION:*** Formal environmental education is provided through Schools, Colleges and Universities as a part of their curriculum.

**B. *NON-FORMAL ENVIRONMENTAL EDUCATION:***

It is provided through NGOs, Eco-clubs and Mass media etc.

# LECTURE-30: ENVIRONMENTAL EDUCATION AND NEED FOR WOMEN EDUCATION.....

## WOMEN EDUCATION IN INDIA:

Women in India constitute 50 per cent of the country's human resources and their contributions are vital for the Nation's progress. But the magnitude of illiteracy among women is very high. Only 54.16 per cent of women are literates as per 2001 census. Even though the education system expanded very rapidly, the gender gap in literacy remains conspicuous by its presence. The Constitution of India confers on women, equal rights and opportunities in all fields.

# LECTURE-30: ENVIRONMENTAL EDUCATION AND NEED FOR WOMEN EDUCATION.....

## THE FACTORS/OBSTACLES RESPONSIBLE FOR LOW FEMALE LITERACY RATE IN INDIA:

- Gender based inequality.
- Social discrimination and economic exploitation
- Occupation of girl child in domestic chores
- Low enrolment of girls in schools
- Absence of female teachers in schools.
- Schools established in faraway places etc.

# LECTURE-30: ENVIRONMENTAL EDUCATION AND NEED FOR WOMEN EDUCATION.....

## STRATEGIES ADOPTED BY THE GOVERNMENT FOR INCREASING FEMALE LITERACY IN THE COUNTRY:

- Providing free and compulsory education for all girls up to 20 years.
- Bringing out changes in the attitudes of parents and in the society.
- Removal of gender bias in the school curriculum
- Establishment of more number of NFE (Non-Formal Education) schools to enroll girls and women of different age groups.
- Widening the scope of Distance Education Programme to cover all categories of people especially rural women.

# LECTURE-30: ENVIRONMENTAL EDUCATION AND NEED FOR WOMEN EDUCATION.....

## VARIOUS SCHEMES LAUNCHED BY GOVERNMENT ARE AS FOLLOWS:

- I. **INDIRA MAHILA YOJNA:**
- II. **MAHILA SAMRIDHI YOJNA:**
- III. **BALIKA SAMRIDHI YOJNA:**
- IV. **SWASHAKTI:**
- V. **SWADHAR:**
- VI. **SWAYAMSIDHA:**

THANK YOU