

### DEFORESTATION:

- ➤ In India, at present approximately 19% of total land is forest area.
- > Causes of deforestation are-
  - -increase in use of timber.
  - -fuel wood.
  - -construction.
  - -for cattle grazing.
  - -for agricultural or industrial purpose.
  - -hydroelectric projects, dams, artificial lakes.



### **DEFORESTATION:**

- > Deforestation causes-
  - -biotic pressure.
  - -affects water sources.
  - -affects clean air.
  - -cause uncontrolled flood.
  - -land degradation.
  - -disturbs carbon cycle i. e. photosynthesis.
  - -threatens extinction of plant species.



# POPULATION GROWTH:

- ➤ Increase in population causes increased use of food water, air, fuel etc. which results in adverse effect.
- > Density of population is not equal.
- ➤ Due to technical advancement, rate of using natural sources are increased without considering availability.
- ➤ Population growth is due to decrease in death rate & increase in birth rate.



## POPULATION GROWTH:

- > Population growth resulted in-
  - -shortage of food, water & fresh air.
  - -excessive use of fuel & other natural resources.
  - -increase in domestic pollution, sewage, wastage.
  - -cutting of forests without creating new forests.
  - -causes more problem like disposal of waste, slum area, increase in pollution etc.



## INDUSTRIAL DEVELOPMENT:

- > New inventions are continuous since stone-age.
- ➤ In the beginning, inventions were for necessity & now it is for luxury, convenience & entertainment.
- > Growing industries have caused increase in pollution.
- ➤ Industrialization results in increased use of chemicals, machines, mineral oil, improper methods of production, fertilizers, mining etc.



# INDUSTRIAL DEVELOPMENT:

- ➤ New techniques are used without considering or giving attention to environment.
- ➤ Release of various pollutants- Carbon dioxide, Carbon monoxide, DDT & other chemicals, dust, vapour, gases, Radioactive substance, smoke, smog etc.
- Industrial accidents.
- ➤ Causes air, water, land pollution due to gas, liquid or solid wastes & by-products.



### URBANIZATION:

- Caused due to-
  - -inhabitants of rural area coming to the urban area.
  - -landlessness.
  - -loss of job.
  - -attraction of white collar jobs in cities.
  - -disregard to rural life & manual work.
  - -population growth.
  - -change in value pattern.



### **URBANIZATION:**

- ➤ It denotes- industrialization, rapid development in transport & communication, development of trade & commerce, better mobility.
- ➤ Results in increasing slum area which causes pollution, improper sanitation & disposal of wastage, garbage.
- ➤ Also causes noise pollution.
- > Reduction in greenery.
- ➤ Increase in construction of buildings, roads, dams, rail. road, & air transportation.



## MODERN PRODUCTIVE TECHNOLOGIES:

- > 20<sup>th</sup> century is noted as the century of inventions.
- > Plastics, chemicals & machines.
- ➤ More productive technologies for satisfying increasing needs of human beings in agriculture, industry & domestic aspects.
- Major pollutants are- synthetic fibers, plastic, petroleum products, textile industry, paper industry, fertilizers, chemicals, entertainment, globalization, use of land, air, ocean for transportation, agriculture & industrial use.



#### **ACCIDENTS:**

- ➤ Accidents in industries, transportation & also natural or man-made calamities.
- > Accidents in oceans of warships or oil containing ships.

## WAR:

➤ Weapons are used in massive extend & causes mass destruction.

### **DOMESTIC POLLUTION:**

- > Use of fuel, wood, coal, kerosene etc.
- > Use of detergent, soap, pesticides etc.
- > Use of television, radio, music system & appliances.
- Disposal of solid waste.

## POVERTY:

> Root cause of almost all pollutions.

#### CAUSES OF AIR POLLUTION:

- > Industries.
- > Automobiles.
- Metal industry, building materials, paints, pigments, textile chemicals, dyes, rubber & leather industry
- > Thermal power station, coal using industries.
- > Combustion.
- > Earth moving operations.
- > Industrial accidents, negligence.
- Earthquake, Volcano etc.



## CAUSES OF WATER POLLUTION:

- > Dissolved chemicals in water percolated through soil.
- > Fertilizers & Agricultural chemicals.
- > Industrial disasters.
- Sewage water from metal mining industries, coal or sulpher mining, petroleum & natural gas drilling industry, stone crushing, clay supply industries, detergents etc.
- ➤ Water from slaughter houses.
- Municipal waste.
- Food processing industries, textile industries, paper & pulp industry, petro-chemical industry etc.
- ➤ Damage to sewage system, oil spread in sea.
- ➤ Disposal of dead bodies & plants.
- ➤ Natural calamities, flood, drought, earthquake.

#### CAUSES OF LAND POLLUTION:

- ➤ Disposal of solid waste such as domestic or household waste, industrial waste, garbage, rubbish etc.
- ➤ Plastic- non biodegradable waste.
- > Industrial & agricultural chemicals.
- ➤ Massive Industrialization.
- > Improper Agriculture.
- > Felling trees & deforestation.
- > Construction of concrete jungle.
- > Land slide.
- > Mining.
- > Drought, desertification, lack of rainfall.



#### CAUSES OF NOISE POLLUTION:

- ➤ Industrial sources, cotton mills, workshops.
- > Loudspeakers at temples, mosque, ceremonies, functions.
- > Automobiles, horns, trains, aircrafts.
- > Construction machines.
- > Radio, television, music systems etc.
- > Crackers.
- > People's cry.
- > Domestic appliances.
- > Accidents.
- > Natural calamities.



#### CAUSES OF FOOD POLLUTION:

- > Use of chemical fertilizers.
- > Use of pesticides, insecticides, herbicides, fumigant.
- > Improper processing & cultivation.
- > Improper storage & transportation.
- ➤ Unhygienic personal maintenance.
- > Improper sanitation.
- > Improper methods of cooking.



#### CAUSES OF RADIATION POLLUTION:

- Nuclear power plant/reactors/nuclear fuel.
- Nuclear tests carried by Defense Personnels
- Uranium mining
- Use of radio nuclides in industries
- Disposal of Nuclear wastes produced in laboratories, hospitals, radioactive materials, colour television etc.
- Clouds formed during atomic explosion contains radioactive materials & spread very fast all round

