PVA

Pollution –

- Aire pollution - defenition
  - Causes
  - Effects
  - Control measure.
- Water pollution – River, Marine, Thermal.
  - Defenition
  - Causes
  - Effects
  - Control measures.
- E Waste
  - Defenition
  - Sources
  - Effects.
  - E Waste Management.
- Plastic Waste.
  - Catagories of plastic
  - Sources.
  - Effects.
  - Mgt.

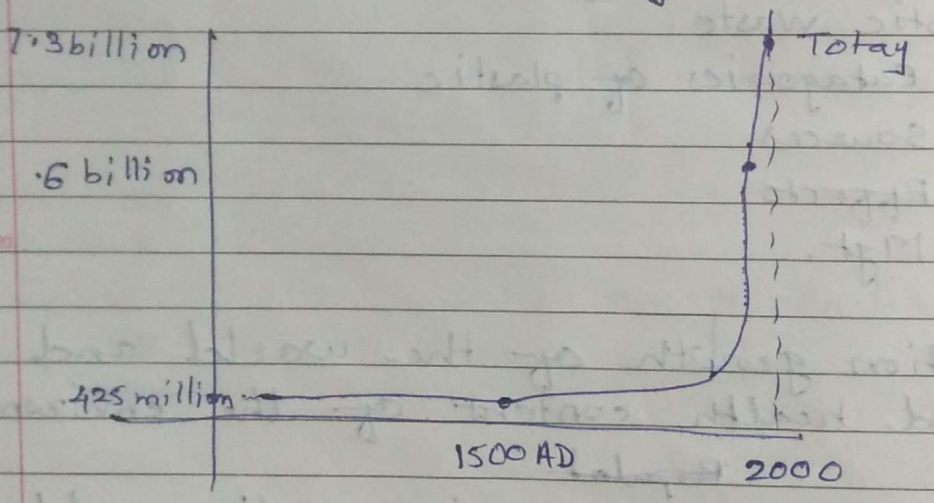
* Population growth of the world and reduced health content of the environment.

- ~~Popula~~

- The human population of the world has increased extremely fast over the past about 200 years, and most particularly during the last about 5 decades. The world population is growing by approx. 74 million people / year. Population growth is not evenly distributed across the globe. Scientists are yet to conclusively determine the human 'carrying capacity' of

In 2015 the world population is more than 7.3 billion people. Thats more than that 7.3 billion bodies that need to be fed, clothed, kept warm & ideally, nourished & educated. More than 7.3 billion individuals who, while busy consuming resources, are also producing vast quantities of waste, and one number continue to grow.

The most of of our existance the human population has grown very slowly, kept in check by disease, climate fluctuations & other social factors. It took until 1804 for us to reach 1 billion people. Since then, continuing improvements in nutrition, medicine & technology have seen our population increased rapidly.



The United Nations estimates that the world population will reach 9.2 billion by 2050

8 billion by 2025

11 billion by 2045.

The impact of so many humans on the environment takes two major forms:

1. Consumption of resources such as land, food, water, air, fossil fuels & minerals.

2. Waste products as a result of consumption such air & water pollutants, toxic materials & greenhouse gases.

The impact of growing population on envt. ~~may~~ is resulting in.

Deforestation.
Desertification of grasslands.
air, water, soil pollution.
Global warming,
O_3 depletion.
Acid rain
Depletion of minerals.
Flood, drought, landslides
Loss of biodiversity.

Can be contrasted by public awareness.

Energy crisis –

Due to developmental activities, the population growth, changed lifestyle the demand of energy is increasing rapidly. But the supply is adequate.

Renewable resources –

Wind, Hydro, Tidel, OTEC (–Ocean Thermal energy Conservation), Solar, Biomass, Biogas, Liquid biofuel, Geothermal, Hydrogen.

Non renewable – Coal, petroleum, Natural gas (CNG), Nuclear energy.

– problem – stock is limited.

– Polluting.

Global electricity demand

2021 – 5 %

2022 – 4 %.

per capita consumption in India

1947 – 16.3 units

March 2020 – 1208 units. kwh per year.

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Date / /

Bio fuels -

Biofuel is a fuel that is produced over a short time span from biomass, rather than by the very slow natural processes involved in the formation of fossil fuels, such as oil. Since biomass can be used as a fuel directly.

- Ethanol (from molasses, corn, sugarcane)
- biodiesel (sources from vegetable oils and liquid animal fats.)
- Green diesel - (derived from algae & other plant sources)
- Biogas (Methane derived from animal manure & other digested organic material)

Can be used for household activities, boiler, transportation.

Occupational health hazards -

- Ergonomic - strain on body over a period of time.
- Chemical -
- Noise
- Biological hazards - Healthcare professionals.
- Physical -11-
- Radiation
- Psychosocial hazard
- CO poisoning
- Falling - construction workers.
- Workplace violence
- Asthama
- Stress
- Decompression sickness.

GHGs emitted in day to day life by various activities

Concept of carbon footprint -

A carbon footprint is the total greenhouse gas emissions caused by an individual, event, organization, service, place or product, expressed as CO_2 equivalent.

GHGs - CO_2, methane -

Global ~~average~~ average annual carbon footprint per person in 2014 was 5 tonnes CO_2