

Sustainable Development

Introduction:-

→ "Sustainable Development is the development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

→ The concept of sustainable development first emerged in 1960s when environmentalists started debating on the impact of economic growth on the environment.

→ The most widely adopted report is "Our Common Future" also known as the "Brundtland Report" was published by the World Commission on Environment and its Development in 1987.

Elements of Sustainable Development:

→ The key feature of the sustainable development is that it comprises

three elements i.e.,

- Environment
- Society
- Economy

And three principles such as:

- Planet
- People
- Profit.

All the three are balanced so that one doesn't destroy another.

→ The environmental responsibility is to preserve breeding stocks for next year.

→ The social responsibility is to generate jobs within the community.

→ The economic responsibility is to stay in profit.

→ The 3 pillars of sustainability are powerful tool for defining complete

Sustainability problem

→ this consists of economic, social & environmental pillars.

→ If any one pillar is weak then system as whole is unsustainable.

→ For solving this problem, some of ^{developed} organisations, are World Trade Organisation (WTO) & Organisation for Economic Cooperation & Development (OECD).

→ These organisations help to solve the sustainability problem by mainly focusing on economic pillar, since economic growth is needed especially for developing nations.

→ Thus solⁿ to sust. problem include making all 3 pillars sustainable.

Environmental Sanitation:-

→ Sanitation is an arrangement for preventing human contact with the hazards of wastes & Sewage wastewater.

→ It is a method of preparation for protecting and promoting health.

→ The World Health Organization states that

"Sanitation generally refers to the provision of facilities and services for the safe disposal of human waste.

→ Inadequate sanitation is a major cause of diseases.

→ The word "sanitation" also refers to the maintenance of hygienic conditions through services such as garbage collection and waste water disposal.

Types of Lowest Disposal Techniques:-

The conditions for sanitation includes

1) clean & safe water supply.

2) clean & safe ambient air.

- 3) Efficient & safe animal, human & industrial waste disposal.
- 4) Protection of food from biological and chemical contaminants.
- 5) Adequate housing in clean & safe surroundings.

Low-cost Disposal Methods:

Landfill:-

- This is a common method that involves burying the waste.
- Landfills are usually designed in places such as quarries or borrow pits.
- This is an effective & inexpensive method.
- Proper care has to be taken to avoid vermin, wind-blown litter, leachate, greenhouse gas etc.

Incineration:-

- Incineration also called as thermal treatment disposes of solid, liquid & gaseous wastes through combustion, converting

them into gaseous residues.

- It can be in the form of heat, gas, steam or ash.
- This method can be carried out on small scale as well as large scale.
- Gaseous pollutants such as dioxins, furans & PAHs have adverse environmental effects.

Recycling:

- This method collects & reuses waste materials such as beverage containers & food cans.
- The materials used to make these items are reprocessed into new products.
- Material for recycling is collected separately from general waste & this procedure is called "curbside collection."