

SOCIAL AND THE ENVIRONMENT

Social Issues and the Environment

Sustainable development :-

Development that meets the needs of the present without compromising the ability of the future to meet their own needs.

Objectives.

- ⇒ Promoting equity.
- ⇒ Improving quality of our life
- ⇒ Sustaining our natural resources
- ⇒ Protecting Health and ecosystem.

Factors Affecting.

- ⇒ Population
- ⇒ Consumption
- ⇒ Pollution
- ⇒ Land use
- ⇒ Production
- ⇒ Non-renewable resources

Importance steps to attain sustainable development.

- a) Stabilizing population
- b) change over in energy.
- c) Technological change over.
- d) Economic change over.
- e) Ecological security

- f. Advance planning.
- g. Water resource Management
- h) Conservation of biodiversity.
- i. control of air, water, land

Pollution

- j. Environmental education and awareness

k. public participation

l. 3R approach



Reduce

Reuse

Recycle.

m. Reduction in Poverty.

Water conservation

Water conservation means saving or sharing water for future generation

Need :-

⇒ Rapid industrial growth and population explosion have increased demand for water.

⇒ Urban development, raising water-intensive crops on agriculture and replacement of open dug wells by bore wells lead to exploitation.

Water Conservation Techniques

- Reduce evaporation losses.
- Reduce irrigation losses.
- Reuse of water.
- Preventing wastage of water.
- Decrease run off losses.
- Minimum use of all available water.
- Conjunctive use of water.

Rain water Harvesting

Rain water Harvesting is a technique of increasing the recharge of ground water by capturing and storing rainwater.

Objectives.

To meet the increasing demand for water

To restore supplies from the aquifers due to over exploitation

To improve supplies from
aquifers lacking adequate recharge
components.

Catchments

Coarse mesh

Gutters

Conduits

Filter

First flushing

Advantages.

a) Recharge aquifers

b) Rise in ground water level

WATERSHED MANAGEMENT

Entire land area that
catches rain and ultimately
drains into a particular waterho
OR body of water.

Functions

Watershed collects water
from rainfall, snow melt and
store it.

Flood plain along the banks of river is important storage site.

Main features.

- * Identifying and prioritizing water quality problems in the watershed.

- * Developing increased activities involvement.

- * Co-ordinating activities with other agencies.

- * Measuring success through increased and more efficient monitoring and other data gathering.

Objectives.

- * To transport water from land surface.

- * To protect soil from soil erosion.

- * To minimize the risk of flood, drought.

- * To raise ground water level.

- * To develop the rural areas by constructing reservoirs.

Techniques.

Trenches were dig at equal intervals to improve ground water storage.

All over the catments area an earthen dam and stone embankment should be raised to check the run-off water.

RESETTLEMENT AND REHABILITATION.

The shifting of people from such project areas to the new area of land is called resettlement. The facilities provided to the resettlement peoples to satisfy their needs in the new area.

Causes.

a) Developmental activities.

b) Disasters.

1) Natural disaster

2) Man-Made disaster.

c) Conservation Initiatives.

Problems

→ Displacement of millions of tribals from their home land to new areas as refugees

→ This increase poverty due to loss of land, home, job, food etc.,

→ Loss of identity and loss of the intimate link between people and environment is one of the biggest loss.

Consumerism

It is the purchasing and consumption of resources by the people.

Waste products consumerism

Food waste

Concrete waste

Packing

Material.

Rights of seller.

* Right to introduce any product

* Right to change any price.

* Right to use incentives to promote their products.

Rights to buyers.

⇒ Right to buy or not

⇒ Right to expect the products

to be safe.

⇒ Right to expect the

Product to perform as claimed.

ENVIRONMENTAL LEGISLATION

The Environment Protection Act

1986.

Aspects

- * Define the environment, hazardous substances, Environmental population
- * Sets up the standard of quality of air, water & soil.
- * Sets the permissible limits of pollutants including noise.
- * Prohibitions & restrictions to locate industries.

Functions

Encourage the industries to go for treatment of waste water with the available technology.

To adopt recycling & reusing of wastes.

To Maximise recovery of energy.

To consider the assimilative capacity of the environment before discharge.

Wild - life Protection Act 1972

Aspects :-

1. Terminology, Advisory Boards, wordness their powers and duties were all framed.

2. Listing of endangered species.

3. Hunting of endangered species was rendered illegal.

4. Protection of endangered species.

Drawbacks.

1. Mild penalty to offenders.

2. Illegal wild life trade in

J & K.

3. Personal ownership for animal articles like tiger & leopard skins.

Forest Act 1980.

Aspects.

1. State government was empowered.
2. Advisory committee for forest concerns was formed.
3. Cultivation, Fencing, Pipelines, Trenching etc.,

Amendments.

1. Provision for non-forest activities with the approach of central government was made possible.
2. Exploration or survey was strictly prohibited in wildlife sanctuaries, National parks etc.,
3. Trees of Medicinal values, also need to be approved by central government.

Drawbacks.

1. Very poor community participation
2. Local community not being considered for decision Making.

WATER PREVENTION & CONTROL ACT

1974

Aim :-

Maintenance and restoration of quality of all types of surface and ground water.

Features and Provision :-

Establishment of the state pollution control board & CPCB.

Provision for funds, budgets, accounts & audits of the SPCB & CPCB.

Provisions for the various penalties for the defaulters and procedures for the same.

The duties were responsible of the SPCB & CPCB were framed.

The AIR (PREVENTION & CONTROL POLLUTION ACT - 1981)

Aspects .

Prevention, control & abatement of air pollution

Noise was considered as a Pollution.

Activities of SPCB & CPCB.

Disaster Management

Disaster is a geological process or an event, concentrated in times and space in which a society undergoes severe danger and causes loss of its members and physical property.

Floods

Whenever the magnitude of water flow exceeds the carrying capacity of the channel within the bank, the excess of water overflows on the surrounding cause floods.

- ⇒ Heavy rainfall
- ⇒ Sudden snow melt raises the quality
- ⇒ Sudden and excess release of impounded water behind dams.
- ⇒ Clearing of forests for agriculture has also increased severity of floods.

Effects

* Suffering of people in low lying areas.

* Damages crops.

* Economic loss and health related problems

* Distruption of day-to-day life

Flood Management

* Encroachment of floods ways should be banned.

* Building walls prevent spilling out the flood water over flood plains.

* River Networking.

* Build check dams.

CYCLONE

Cyclone is a Meteorological Phenomenon intense depression forming over the open oceans and moving towards the land. On reaching the shores, it move into the interior of the land or along the shore lines.

Effects

Damages to communication, canals, livestock, human life, crops, roads, transport.

cyclones occurrence slow down the development activities of the area.

Houses collapse and people are rendered homeless.

Management

⇒ Forecasting weather, conditions that reveal to strength and intensity and of the storm.

⇒ satellite pictures are analysed from time.

⇒ Afforestation, dams and wind breaks.

⇒ Though cyclones cannot be stopped effects can be minimised.

Earthquake.

An Earthquake is a sudden vibrations caused on the earth's surface due to the sudden release of the tremendous amount of energy stored in the rocks under the earth's crust.

causes.

Disequilibrium in any part of the earth's crust caused by volcanic eruption, hydrostatic pressure of man made water bodies.

Severity.

Measured by Richter scale.

less than 4 → Insignificant

4 - 4.9 → Minor

5 - 5.9 → Damaging.

6 - 6.9 → Destructive

7 - 7.9 → Major

More than 8 → Great.

Effects.

- ⇒ Damages to dams, bridges, pipelines
- ⇒ Reformation of ground system.
- ⇒ collapse houses.

TSUNAMI

Seismic waves caused by earthquake travel through sea water and generates high sea water. This causes great loss of life and property.

Management :-

Constructing earthquake resistant building in the earthquake prone areas.

Wooden houses are preferred in earthquake prone areas in Japan.

Seismic hazard map should give the information about the magnitude of intensity of earthquakes.