

Integrating Environment Protection & Development Planning

Venue:

Andhra Pradesh Human Resource Development Institute
(Govt. of Andhra Pradesh)
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□ Environment protection

- what is the environment**
- what is the role of human in the environment**
- does the human is protecting or exploiting**
- why do you need to protect the environment**
- who can protect**
- choice for protection or prevention**
- what is the scope for protection**
- at what cost**
- what is the time needed**

□ Development planning

- what are the resources needed for development
- is development independent of resources
- if yes, what kind of development it can be planned
- how to minimize to bare minimum impacts
- resources are sustainable and renewable
- targeted benefits from development
- what to do for sustainability of planning
- socio-economic development
- economic development
- urbanization
- regional development

□ Environment

Environment includes the living and nonliving things that an organism interacts with, or has an effect on it.

Living elements that an organism interacts with are known as biotic elements: animals, plants, etc., abiotic elements are non living things which include air, water, sunlight etc.

❑ **Environment protection**

It is an action to protect natural environment by individuals, organizations and government with an objective to conserve natural resources.

Natural Resources Management –

Management of natural resources such as land, air, water and both living and non-living things interact

- optimization of the resources utilization to cater need for the present and future generations

ENVIRONMENTAL POLLUTION - STRATEGY FOR CONTROL

Any factor, whether biotic or abiotic contributing to the degradation of Environment is pollution. Environmental pollution can be classified as

- 1) Water pollution
- 2) Soil pollution
- 3) Air pollution
- 4) Noise pollution

Water pollution is an alteration of physical, chemical, and biological properties of water in a water body which renders it unsuitable for use as a drinking water source or renders it unsafe for human or animal health, for industry, agriculture or recreation.

□ Impacts

Air pollution – a by-product of economic and industrial development. Air pollution is one of the most serious environmental risks.

Outdoor air pollution caused more than 3 million premature deaths in 2010. It is estimated to cause 6 to 9 million premature deaths a year by 2060 and cost 1% of global GDP.

The cost of serious health consequences from particulate pollution is estimated at 3 per cent of India's GDP. The total damage because of environmental degradation amounts to Rs 3.75 trillion, which is equivalent to 5.7 per cent of the country's GDP.

AIR POLLUTION

•Air pollution is the contamination of atmospheric air due to the presence of foreign substances and gases (from anthropogenic or natural resources) which have harmful and poisonous effects. The release of gaseous pollutants from burning fuel of motor vehicles, industrial processes, burning of garbage etc., are contributing to the air pollution.

•Power sector amongst various sectors has the highest emissions (51%), because of its size and higher dependence on fossil fuels. The other major sectors contributing to the carbon emission - Transport (16%), Industrial sector Steel (10%), Cement (4%), Chemicals (3%) and Other (15%)

❑ **Impacts**

Water pollution is a serious problem in India. More than 70 per cent of its surface water resources and a growing percentage of groundwater reserves are **contaminated** by biological, toxic, organic, and inorganic pollutants.

Degraded water quality can contribute to water scarcity as limits its availability for both human use and for the ecosystem.

Lack of water, sanitation, and hygiene results in the loss of 0.4 million lives while air pollution contributes to the death of 0.52 million people annually in India

Wastes that contribute to water pollution are

1. Sewage
2. Industrial waste
3. Agricultural & Dairy waste and run-off from agricultural land

Classification of pollution

Pollution in water bodies can be classified as follows:

1. Organic Pollution
2. Bacterial Pollution
3. Inorganic and mineral pollution
4. Toxic Pollution
5. Mechanical & Physical Pollution

SOURCES OF POLLUTION

1. Sources of organic pollution

- a) Domestic sewage from human settlements - Towns and Cities.
- b) Trade wastes from Dairy, food and agro-industries, Distilleries, Paper & Pulp industry - Refineries.
- c) Run-off from agricultural land.

2. Sources of Bacterial pollution

- a) Domestic sewage
- b) Dairy & Agricultural waste.

NOISE LIMITS (IN DECIBELS)

	DAY	NIGHT
INDUSTRIAL AREA	75.0	70.0
COMMERCIAL AREA	65.0	55.0
RESIDENTIAL AREA	55.0	45.0
SILENCE ZONE	50.0	40.0

DAY : 6 AM TO 10 PM

NIGHT : 10 PM TO 6 AM

**SILENCE ZONE : AREAS 100 METERS AROUND HOSPITALS,
EDUCATIONAL INSTITUTIONS AND COURTS.**

Acts & Rules -

- 1) Water (Prevention & Control of Pollution) Act, 1974, Amended in 1978, Again Amended in 1988.
- 2) Water (Prevention & Control of Pollution) Cess Act, 1977, Amended in 1991.
- 3) Air (Prevention & Control of Pollution) Act, 1981, Amended in 1987.
- 4) Environment (Protection) Act, 1986.
- 5) Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 (1989, Amended in 2008) .
- 6) Public Liability Insurance Act. 1991, Amended in 1992.
- 7) Bio-Medical waste Management Rules, 2016 (1998, Amended in 2003)
- 8) Plastic Waste Management Rules, 2016 (1999) .
- 9) Solid Waste Management Rules, 2016 (2000).
- 10) E-Waste (Management) Rules, 2016 (2011) .
- 11) Construction and Demolition Waste Management Rules, 2016.
- 12) Environment Impact Assessment Notification, 2006 (1994)
- 13) CRZ Notification, 2018
- 14) Noise Pollution (Regulation and Control) Rules, 2000

➤ **Environmental consideration in Development planning**

Designing of policies for systematic challenges in environmental protection

Environmental considerations in the **policy** apparatus

Goals for environmental sustainability and **linkage** for action

Capacity building for decision makers

Accurate, **updated** and transparent data access

Integrating of Environment Protection & Development Planning -

They are interlinked each and essentially balanced to achieve sustainable growth. The more balance in between environment protection and development planning, the more sustainable planning. Any plan for development shall take care the impacts on renewal and non-renewable resources, to minimize the negative impacts to bare minimum and optimum utilization of the resources indeed during construction and operational phase;

Case study – 1 (Industrial project)

or

Case study – 2 (common infrastructure development at village/ town)

THANK YOU