### Chapter-12 Geographical Perspective on selected

#### **Pollution**

It is the unwanted matter and energy in the environment which harms to the man Types of pollution:

- 1. Air pollution
- 2. Water pollution
- 3. Land pollution
- 4. Noise pollution

Pollution	Causes	Pollutants	Effects	Solution
Air Pollution	Combustion of coal diesel, industrial processes solid waste disposal sewage disposal	Oxides of sulphur, nitrogen, carbon monoxide, ammonia, lead, aldehydes asbestos &beryllium	Causes various diseases, respiratory, nervous and circulatory systems cause smog in cities, acid rain, in return cause damage to the buildings	Plantation, use of filters in industries, use of nonconventional energy resources use of public transport
Water Pollution	Sewage disposal, urban runoff, toxic effluents, runoff from Ag. lands	Odor, suspended solids, ammonia, urea, chloride, grease, insecticide, heavy metals	Water borne diseases diarrhea, intestinal worms, hepatitis, ¼ diseases are caused by water pollution	Controlled use of fertilizers, pesticides, treat the waste before release to the streams from industries
Land Pollution	Improper human activities disposal of untreated waste	Human and animal excreta, virus and bacteria garbage, vectors therein, radio active subsistence	Exhaustion of land land pollution, heavy metals are transferred to the Ag. Products Cause water pollution	Educate the farmers about the importance of land utility and consequences of pollution
Noise Pollution	Air crafts, automobiles trains, industrial processing advertising	High level of noise	cause neural and heart disease	Locate industries away from living areas

#### Sources of Pollution in the Ganga and Yamuna

#### Rivers

River and State	<b>Polluted Stretches</b>	Nature of Pollution	Pollutants
Ganga- UP, BI, WB	1. Downstream of	1. Industries in	Kanpur,
	Kanpur	Kanpur	Allahabad,
	2. Downstream of	2. Domestic and	Varanasi, Patna ,
	Varanasi	urban	Kolkata
	3. Farrakka barrage	3. waste Carcasses of	
		man	
Yamuna – Delhi, UP	1. Delhi to	Diverse of water to	Urban waste from
	confluence with	HR,UP	Delhi
	Chambal	Ag. Runoff, industrial	
	2. Mathura and Agra	waste	

# Case Study- Dharvi the Asia's Largest Slum Features

- There is only one road about 90 feet
- Narrow streets, one toilet for every 1440 people
- Two/three stored buildings with rusty iron gates
- Single room for 12 people
- Tree less sunlight uncollected garbage
- Stagnant pools, fowl water,
- Zari work ,pottery, wood carving , scheduled caste people
- Poor Muslims, treatment of hides and tanning

#### **Urban Waste Disposal**

Overcrowding, congestion, inadequate facilities, poor sanitary conditions, significant quantity of solid waste Pieces of metals, polythene bags, broken glass ware plastic containers ashes garbage and CDs make solid waste

#### **Sources of Urban Waste**

- 1. House hold establishments: thrown in public lands, private contractors sites
- 2. Industrial establishments: thrown in low lying public grounds

#### **Effects of Solid Waste**

- 1. Health hazard due to obnoxious smell, flies and rodents
- 2. Disease like typhoid, diphtheria diarrhea malaria cholera
- 3. They are spitted through rain water
- 4. Industrial waste dumping in the rivers cause water pollution ex. Ganga, Yamuna

#### Case Study - Daurala

- 1. Meerut based NGO developed a model for ecological restoration
- 2. The ground water was contaminated with industrial waste

3. Ngo collected the data about the health conditions of the locality

#### **Steps Taken**

- 1. Overhead tank capacity was increased
- 2. Ponds were cleaned
- 3. Silt was removed
- 4. Rain water harvesting structures were made
- 5. 1000 trees have been planted

#### **Rural - Urban Migration**

#### Reasons

- 1. Demand for labour in urban areas
- 2. Low job opportunities in rural areas
- 3. Un-development of rural areas
- 4. People migrate to bigger cities

#### **Problems of Slum Areas**

- 1. Least choice
- 2. Dilapidated houses
- 3. Poor hygienic conditions
- 4. Poor ventilation
- 5. Lack of drinking water, light, toilet facilities
- 6. Overcrowded, narrow streets, low paid workers
- 7. Prone to diseases, alcoholism, vandalism, apathy, social exclusion

#### **Land Degradation**

#### Causes

- 1. Pressure on agriculture
- 2. Increase in population density
- 3. Faulty methods of agriculture
- 4. Excessive use of fertilizers, pesticides
- 5. Indiscriminate cutting of trees
- 6. Heavy rains
- 7. Floods

# Classification of Waste Land by NRSA using remote sensing Techniques

- 1. Caused by Natural Agents
  - Gullies, ravenous land, deserted , coastal sands, barren rocky areas, steep sloping land, glacial areas
- 2. Caused by Natural as well as Human Factors
  - Waterlogged and marshy areas, land affected by salinity and alkalinity, land with or without scrub
- 3. Caused by Human Actions

## **Key Notes**

Degraded shifting cultivated areas, degraded land under plantation crops, degraded forests, degraded pastures, mining and industrial waste lands

### **Case Study- Ecological Balance**

#### Reasons

- 1. Westernmost climatic zone in MP.
- 2. One of the five backward districts of the country
- 3. High concentration of Bhills
- 4. suffer from poverty
- 5. Most degraded land

#### **Objectives**

- 1. Start watershed development programme
- 2. Link of water, land, vegetation
- 3. Natural resource management
- 4. Increase common property resources
- 5. Each family should plant one tree at least
- 6. Planted fodder grass
- 7. Social fencing
- 8. Stop open grazing land
- 9. Stopping the common property resources by govt.

#### **Classification of Wasteland by Process**

- 1. Barren and uncultivated wasteland 2.18%
- 2. Natural degraded common waste land 2.4%
- 3. Natural man made common waste land 7.51%
- 4. Man made degraded common waste land 5.88%
- 5. Total degraded land 15.8%