WASTELAND DEVELOPMENT

- Wasteland is that land which is presently lying unused or which is not being used to its optimum potential due to some constraints
- Total wasteland is 14.75% (467021.16 sq km) of Total geographical area.

National wastelands development board classifies wastelands into two categories:

1. Cultivable wastelands

2. Uncultivable wastelands

The cultivable wastelands have been classified into

a. Gullied and/or ravenous lands

b. Undulating land without shrubs

c. Surface water logging land and marsh

d. Salt affected land

e. Shifting cultivation area

f. Degraded forestland

g. Degraded pasture / grazing land

h. Degraded forest plantations

i. Strip lands

j. Sand dunes

k. Mining / industrial wastelands

Uncultivable wastelands which cannot be used for vegetation are classified as

a) Brown rocky / stony / shut of rocks

b) Steep sloppy areas

c) Snow covered and / or glacier lands

Category-wise wastelands of India

Category	Area(sq km)	TGA%
Gullied and/ or ravenous land medium	6145.96	0.19
Gullied and/or ravenous land-Deep/very deep ravine	1266.06	0.04
Land with dense scrub	86979.91	2.75
Land with open scrub	93033.00	2.94
Waterlogged and Marshy land-Permanent	1757.07	0.06
Waterlogged and Marshy land-Seasonal	6946.31	0.22
Land affected by salinity/alkalinity-Moderate	5414.53	0.17
Land affected by salinity/alkalinity-Strong	1391.09	0.04
Shifting cultivation area-Current Jhum	4814.68	0.15
Shifting cultivation area-Abandoned Jhum	4210.46	0.13
Under-utilized/degraded forest-Scrub dominated	83699.71	2.64
Agricultural land inside notified forest land	15680.26	0.50
Degraded pastures/grazing land	6832,17	0.22
Degraded land under plantation crop	278.53	0.01
Sands- Riverine	2111.96	0.07
Sands- Coastal sand	654.47	0.02
Sands- Desert Sand	3934.80	0.12
Sands- Semi-stabilized to stabilized (>40m) dune	9279.75	0.29
Sands- Semi-stabilized to stabilized moderately high (15- 40m) dune	14273.03	0.45
Mining Wastelands	593.65	0.02
Industrial wastelands	58.00	0.00
Barren rocky area	59482.29	1.88
Snow covered and glacial area	58183.44	1.84
Total wasteland area	467021.16	14.75

Causes of Wastelands Formation

1. Deforestation

2. Over-cultivation

3. Over grazing

4. Unskilled irrigation

5. Improper developmental activities such as dumping of wastes, mine wastes

- **Afforestation for Sand Dune Stabilization**

- As much as 58% of western Rajasthan is covered by moving of semi – stabilized sand dunes.
- Dun' means, hilly topographical feature.
- In India 11.996m ha lands of Rajasthan and 1.47 mha of Coastal regions are facing serious wind erosion problems

- **Different vegetative methods for soil and water conservation**

- **Strip planting**

In this method, erosion permitting and erosion resisting crops are alternatively raised at right angle to the slope of the land to retard the velocity of rain water

- **Rotational cropping**

In this method, either grain crops grasses or legumes along with trees are planted in the field.

- **Cover cropping**

Trees and grasses are grown to cover the earth's surface.

Afforestation in Hilly areas

The hills have been denuded by unrestricted fallings associated with excessive grazing and frequent fires. In some areas, due to the growth of grasses, the erosion has been less damaging. But in most cases the surface soil has been eroded. In many areas, even subsoil has disappeared, leaving no soil material. The soil is generally poor in moisture and nutrients. When soil is present in the area , contour trenching may be done as it helps in soil and water conservation. When the slopes are steeper, digging of trenches may not e possible and in such cases, preparation of pits for planting may be adopted.