

## Cost of Land Degradation →

The Terrestrial bio-productive system that comprises soil, vegetation, other biota, and the ecological and hydrological processes that operate within the system. is called land.

Land Degradation refers to Reduction or loss of biological or economic productivity and complexity of rain-fed cropland, irrigated cropland or range, pasture, forests and woodlands resulting from land use or from a process or combination of processes arising from human activities and habitation patterns such as —

- Soil erosion caused by water and or wind
- Deterioration of physical, chemical, biological or economic properties of soil.
- Long-term loss of natural vegetation.

Land degradation in arid, semi-arid and dry sub-humid areas resulting from various factors, including climatic variations and human activities is known refer to as Desertification.

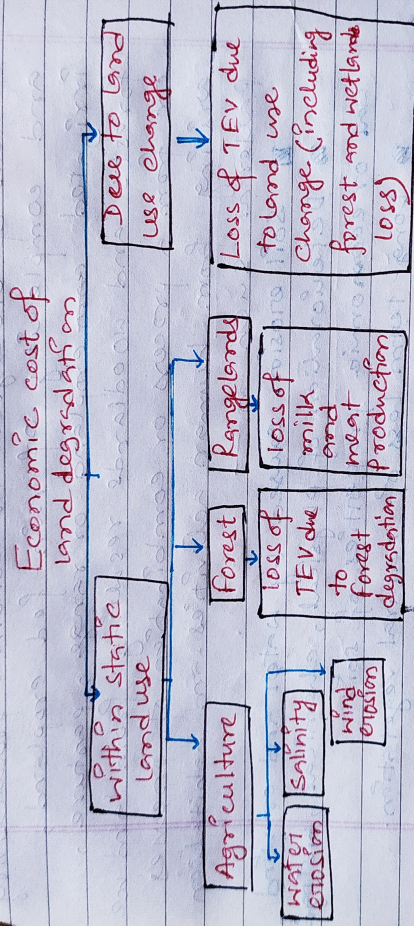
Land Degradation status of India:

Process of Land Degradation	Area (mha)	% of GIA
• water and wind erosion	94.87	28.86
• Acid soil	17.93	5.45
• Alkali/sodic soil	3.7	1.13
• water logged areas	2.78	0.83
• Mining/Industrial	0.26	0.08
<b>Total Degraded Land</b>	<b>120.4</b>	<b>36.63</b>



## Two Aspects of Land Degradation :-

- ⇒ Cost of land degradation on a given land use (forests, agriculture, rangelands) - static
- ⇒ Cost when land moves from a more to a less productive category - change within official or category land use and wetlands



At the national level the on-site costs of land degradation associated with lost crop productivity and declines in milk production is estimated at US \$442 million per year - 7.8% of GDP (Gross Domestic Product) while this initial estimate of the cost of land degradation to the economy may be considered an overestimate given that it is a gross, rather than a net value.

The economic cost of land degradation - The Agricultural or land degradation results in impacts (costs) related to the both on-site and off-site.



On-site effects are those directly related to the land and properties where the erosion takes place.

Off-site impacts by comparison, are impact processes and activities outside of the agricultural area of the land degradation.