

Inventory of Degraded Lands of Gwalior District, Madhya Pradesh Using Remote Sensing Techniques

ABSTRACT

- **Kind of Survey** : Land Degradation Mapping
- **Level of Mapping** : Reconnaissance
- **Scale** : 1:50,000
- **Period of Survey** : February to April, 2000 and June to July, 2000
- **Base Materials** : IRS-1B, LISS-II False Colour Composite at 1:50,000 scale
Survey of India Toposheet on 1:50,000 scale
- **Total Area of District** : 4,56,449 ha
- **Agro-climatic Zone** : 'VIII' The Central Plateau and Hill Region
- **Geographical Extent** : 25⁰ 43' to 26⁰ 21' North Latitude
77⁰ 40' to 78⁰ 39' East Longitude

➤ Nature and Extent of Degraded Lands in Gwalior district, Madhya Pradesh

S. No.	Kind/Severity of Degradation	Area (ha)	%
A. Degraded land			
1.	Severe (sheet, rill and few gullies)	1,12,890	24.73
2.	Very severe (Gullied) erosion with open scrub/ thin vegetation	5,978	1.31
3.	Very severe (Gullied) erosion with medium to thick vegetation	4,223	0.92
4.	Shallow ravines with open scrub/thin vegetation	3,223	0.71
5.	Shallow ravines with medium to thick vegetation	3,402	0.75
6.	Seasonal water-logging	2,646	0.58
7.	Permanent water-logging	317	0.07
8.	Moderately saline	8,449	1.85
9.	Strongly saline	1,244	0.27
10.	Stony waste	1,707	0.38
Sub-total		1,44,079	31.57
B. Normal land		2,94,877	64.60
C. Miscellaneous land		1,7,493	3.83
Total		4,56,446	100.0

➤ Salient Features

- ⇒ Of the total area of Gwalior district about 1,44,079 ha (31.57%) area is under one or the other kind of land degradation.
- ⇒ The major degradation problems are due to water erosion covering 1,29,716 ha (28.42%).
- ⇒ About 2,963 ha (0.65%) area is suffering from water-logging, 9,693 ha (2.12%) from salinity and 1,707 ha (0.38%) area is lying as stony waste.
- ⇒ Degraded lands are well distributed in all tehsils of the district.
- ⇒ About 24,267 ha (5.32%), 40,939 ha (8.97%), 122 ha (0.02%) and 78751 ha (17.26%) area of the total district is under agriculture, forest, plantation and open scrub land, respectively.
- ⇒ Major part of the district area covering 2,94, 877 ha (64.60%) is normal and 17,493 ha (3.83%) is under miscellaneous land.