

Inventory of Degraded Lands of Rajsamand District, Rajasthan Using Remote Sensing Techniques

ABSTRACT

- **Kind of Survey** : Land Degradation Mapping
- **Level of Mapping** : Reconnaissance
- **Scale** : 1:50, 000
- **Period of Survey** : Feb-Mar, 2003 and September, 2004
- **Base Materials** : IRS-ID, Liss-III FCC (Band 2, 3&4) acquired in April 2000
Survey of India topographical maps of 1:50, 000 scale.
- **Total area of District** : 4,55,093 ha
- **Agro- climatic Zone** : XIV Western Dry Region
- **Geographical Extent** : 24⁰ 46' to 26⁰ 01' N Latitudes
73⁰ 28' to 74⁰ 18' E Longitudes

Nature, Extent and Percent of Degraded and Normal Lands in Rajsamand district, Rajasthan

Sl. No.	Particulars	Description	Area in (ha)	Percentage
Water Erosion				
1.	We1a1	Severe water erosion, nearly level to gently sloping, agricultural land.	13340	2.94
2.	We1a3	Severe water erosion, nearly level to gently sloping, plantation.	740	0.16
3.	We1a4	Severe water erosion, nearly level to gently sloping, open scrub.	8075	1.78
4.	We1b1	Severe water erosion, gently to moderately sloping, undulating agricultural .	13180	2.90
5.	We1b2	Severe water erosion, gently to moderately sloping, undulating, forest .	555	0.12
6.	We1b3	Severe water erosion, gently to moderate sloping, undulating land, plantation.	765	0.16
7.	We1b4	Severe water erosion, gently to moderately sloping, undulating land, open scrub.	13905	3.10
8.	We1c1	Severe erosion, strongly sloping, agriculture.	3100	0.68
9.	We1c4	Severe erosion, strongly sloping, open scrub.	14820	3.25

10.	We1d2	Severe erosion, moderately steep to very very steep, forest.	5660	1.24
11.	We1d3	Severe erosion, moderately steep to very very steep, plantation.	225	0.04
12.	We1d4	Severe erosion, moderately steep to very very steep, open scrub.	10850	2.38
13.	We2a1	Very severe erosion, nearly level to gently sloping, agricultural.	1385	0.30
14.	We2a4	Very severe erosion, nearly level to gently sloping, open scrub.	2915	0.64
15.	We2b1	Very severe erosion, gently to moderately sloping, undulating agriculture.	1750	0.38
16.	We2b4	Very severe erosion, gently to moderately sloping, undulating land open scrub.	8765	1.92
17.	We2c4	Very severe erosion, strongly sloping, open scrub	11795	2.59
18.	We2d2	Very severe erosion, steep to very very steep sloping, forest.	2365	0.51
19.	We2d4	Very severe erosion, steep to very very steep sloping, open scrub.	9370	2.05
20.	We1a4/1	Severe erosion, Nearly level to gently sloping, open scrub changed into agriculture.	665	0.14
21.	We1c4/14	Severe erosion, strangely sloping open scrub changed into agriculture lands.	250	0.05
22.	We1a4/3	Severe erosion, nearly level to gently sloping, open scrub changed into plantation.	225	0.04
	Rocky waste		2828	0.62
	Stony waste		2840	0.62
	Mining (Marble) (Mn)		4515	0.99
	Industrial Effluents (Ie)		2025	0.44
	Total Degraded land		1,36,908	30.04
Normal Lands				
AN	Agriculture, normal land		129930	28.60
FN	Forest, normal land		27050	5.94
ON	Open scrub, normal land		146650	32.25
ON/AN	Open scrub		660	0.14

	changed into agriculture, normal land			
	Total Normal Land		304290	66.93
		Miscellaneous		
	Underwater (Ponds, lakes etc.)		3460	0.76
	River		6550	1.42
	Habitation (Build-up area)		3885	0.85
	Total Miscellaneous Land		13895	3.03
	Sub total		318185	69.96
	Total		455093	100.00

➤ **Salient Features:-**

- ⇒ 318185 ha (69.96%) area under normal land.
- ⇒ 136908 ha (30.04%) area under different types of land degraded.
- ⇒ 124700 ha (27.37%) area identified under water erosion.
- ⇒ 5668 ha (1.24%) area identified under rocky/ stony waste.
- ⇒ 4515 ha (0.99%) area identified under marble mining.
- ⇒ 2025 ha (0.44%) area identified under industrial effluent.
- ⇒ 129930 ha (28.60%) area identified under normal agriculture.
- ⇒ 27050 ha (5.94%) area identified under normal forest land.
- ⇒ 146650 ha (32.25%) area identified under normal open scrub land.
- ⇒ 660 ha (0.14%) area land use changed under open scrub to agriculture.
- ⇒ 10010 ha (2.18%) area under water and river.
- ⇒ 3885 ha (0.85%) area under habitation.