

**INVENTORY OF DEGRADED LANDS OF BHANDARA
DISTRICT MAHARASHTRA STATE
USING REMOTE SENSING TECHNIQUES.**

A B S T R A C T

1. **Kind of Survey** : Land Degradation Mapping.
 2. **Level of Mapping** : Reconnaissance.
 3. **Scale** : 1:50,000
 4. **Period of Survey** : November 1997 to November 1998.
 5. **Base Materials** : IRS IB - LISS II FCC of May 93 & Nov. 94 and Survey of India Toposheets on 1:50,000 scale.
 6. **Total Area of District** : 9,34,716 ha.
 7. **Agro-Climatic Zone** : IX, Western Plateau and hilly region.
 8. **Geographical Extent** : 20⁰ 39' to 21⁰ 38' N. latitudes and 79⁰ 27' to 80⁰ 42' E longitudes.

Nature, Extent and Percentage of Degraded and Normal Lands in District Bhandara, Maharashtra.

Sl. No.	Mapping Symbol	Description	Area (ha)	% age
1.	2.	3.	4.	5.
		<u>Water Erosion.</u>		
1.	A1a	Agriculture, plain, severe to very severe erosion	6262	0.67
2.	A1b	Agriculture, Undulating, severe to very severe erosion.	1550	0.17
3.	F1a	Forest, plain, severe to very severe erosion.	11864	1.27
4.	F1b	Forest, undulating, severe to very severe erosion.	2687	0.30
5.	F1c	Forest, hilly, severe to very severe erosion.	1792	0.19
6.	F(A)1a	Forest, under agriculture, plain, severe to very severe erosion.	197	0.02
7.	O1a	Open scrub, plain, severe to very severe erosion.	13824	1.47
8.	O1b	Open scrub, undulating severe to very severe erosion.	3046	0.33
9.	O1c	Open scrub, hilly, severe to very severe erosion.	4283	0.45
10.	O(A)1a	Open scrub, under agriculture, plain, severe to very severe erosion.	3211	0.34

II

1.	2.	3.	4.	5.
11.	O(A)1b	Open scrub, under agriculture, undulating, severe to very severe erosion	212	0.02
12.	O(F)1a	Open scrub, under forest, plain severe to very severe erosion.	263	0.03
Subtotal			49191	5.26
<u>Other Degraded Lands.</u>				
13.	6b	Open cast mines	557	0.07
14.	6c	Rock quarries and spoils	185	0.02
Total degraded lands			49933	5.35
<u>Area Under Normal Lands.</u>				
1.	AN	Agriculture normal lands.	492888	52.73
2.	FN	Forest, Normal lands.	319604	34.19
3.	F(A)N	Forest, under agriculture, normal lands	5764	0.62
4.	F(P)N	Forest, under plantation, normal lands	1445	0.16
5.	ON	Open scrub normal land	21459	2.30
6.	O(A)N	Open scrub under agriculture, normal lands	7731	0.82
7.	O(F)N	Open scrub under forest, normal lands	2111	0.22
8.	O(P)N	Open scrub under plantation, normal lands	663	0.07
9.	W/T/R	Water bodies - Tank, River, Nalah	25538	2.73
10.	H	Habitation	7580	0.81
Sub Total Normal Land			884783	94.65
Grand Total			934716	100

6. Salient features :

- Out of total geographical area of 9,34,716 ha., 49933 ha (5.34%) suffers from land degradation problem.
- Water erosion is the main degradation type covering 49,191 ha. (5.26%), having severe to very severe erosion.
- Very limited area of 742 ha. (0.08%) has problem of open cast mines and rock quarries.

III

- Out of total normal lands 5,02,102 ha (53.72%) is under agriculture and 3,10,008 ha. (33.16%) is under forest.

6. Degradation under different land use.

Land Use	Area (ha)	Percentage of total geographical area
Agriculture	7812	0.84
Forest	16,540	1.77
Open scrub	24,839	2.65
Other (Mines & quarries)	742	0.09
	49,933	5.35