

INVENTORY OF DEGRADED LANDS OF GOA STATE, USING REMOTE SENSING TECHNIQUES

ABSTRACT

1. Details of survey

a. Kind of survey : Land degradation mapping
 b. Level of mapping : Reconnaissance
 c. Scale : 1:50,000

2. Period of survey : Nov. 2000 to March 2001

3. Base material used : IRS-IB, LISS II-B, 1993 Jan. and IRS-IC LISS III Jan/ Mar. 2000 (Band 2, 3, & 4) Geocoded

4. a. Name of the state : GOA (North Goa and South Goa districts)
 b. Total area of state : 3, 70,200 ha
 c. Geographical extent : 14°53'47" to 15°47'59" N latitudes
 73°40'54" to 74°20'11" E longitudes

d. Agroclimatic zone : Goa State falls in Zone XII

5. Type and extent of degraded and normal lands

Sl.No.	Nature of degraded/normal lands	North Goa	South Goa	Total	Percentage
1	Severe water erosion	7389	2739	10128	2.73
2	Very severe water erosion	-	18	18	-
3	Wind activity	371	1098	1469	0.40
4	Water logging	3337	990	4327	1.17
5	Open cast mining	4517	5353	9870	2.67
6	Rock quarry	45	169	214	0.06
7	Salt Pan/salt flat	313	67	380	0.10
8	Mud flat	1432	475	1907	0.52
9	Rock out crop/rocky waste	7230	8730	15960	4.32
	Sub Total	24634	19639	44273	11.96
10	Normal lands	132711	162782	295493	79.82
11	Misc. lands, habitation, river tank etc.	18247	12187	30434	8.22
	Sub-Total	150958	174969	325927	88.04
	Grand Total	175592	194608	370200	100

6. Salient features

a. Out of the total reported area of 44,273 ha are under different types of land degradation.

Distribution of different land degradation, kinds are given below

Sl.No.	Kind of degradation	North Goa	South Goa	Total	Percentage
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6. Salient features (contd.)

b. Distribution of land degradation of different landscapes in different districts are given below:

Sl.No.	Land scape	North Goa	South Goa	Total	Percentage
1	Plain	5837	2647	8484	2.29
2	Undulating	2234	4975	7289	1.96
3	Rolling	9138	7103	16241	4.38
4	Hilly	7425	4914	12339	3.33
	Total	24634	19639	44273	11.96

c. Land degradation due to mining can be categorized into three:

- i) Land excavated to win the ore
- ii) Land use for dumping
- iii) Land degraded by mining activity- agriculture and horticultural areas, siltation of drainage, lakes, water reservoirs etc.

d. North Goa is having relatively more area under land degradation from South Goa.