Inventory of Degraded Lands of Chamba District, Himachal Pradesh Using Remote Sensing Techniques

ABSTRACT

- **Kind of Survey** : Land Degradation Mapping using Remote Sensing Techniques
- **Level of Mapping** : Reconnaissance
- **Scale** : 1:50,000
- **Period of Survey** : June, 95 and October, 95
- **Base Material** : IRS-IA LISS-II FCC of June and October, 1989
  Survey of India Toposheet on 1:50,000 scale
- **Total Area of the District** : 6,71,500 ha
- **Agro-climatic Zone** : Western Himalayan Region (Zone-1)
- **Geographical Extent** : 32^0 10' to 33^0 13' N Latitudes
  75^0 45' to 77^0 33' E Longitudes

- **Nature and Extent of Degraded and Non-Degraded Lands:**

S. No.	Mapping Symbol	Description	Area (ha)	%
Degraded Lands				
1.	A1c	Agriculture, hilly & mountainous, severe to very severe water erosion	60,855	9.06
2.	F1i	Forest, hilly & mountainous, >50% surface coverage of gullied land	3,425	0.51
	Sub Total		**64,280**	**9.57**
3.	O6a	Open scrub, land slides	6,708	1.00
4.	OGm	Other lands, glacial movement	3.250	0.48
	Total Degraded Lands		**74,238**	**11.05**
Non-degraded Lands				
1.	AN	Agriculture land	7,904	1.18
2.	FN	Forest land	2,03,711	30.34
3.	ON	Open scrub land	3,08,773	45.98
4.	Sb	Snow bound land	76,075	11.33
	Total Non-degraded Lands		**596463**	**88.83**
		Miscellaneous lands	799	0.12
	Grand Total		**6,71,500**	**100.00**

- **Salient Findings:**

  - ⇨ The entire district area is mountainous, falling between upper Siwaliks and middle Himalayas.

  - ⇨ Except water erosion and land slides there is no other degradation type encountered in the district.

  - ⇨ Only 11.05% of the total geographical area is degraded.

  - ⇨ Land slide is the most prominent type of land degradation in the district.

  - ⇨ Since the entire district falls under mountainous terrain, approximately 40% area registered on the image falls under shadow expressed on the FCC. As such land degradation mapping using RS data products has not proved significantly effective in case of Chamba district.