

Inventory of Degraded Lands of Bijnor District, Uttar Pradesh using Remote Sensing Techniques

ABSTRACT

- Kind of Survey : Land Degradation Mapping
- Scale : 1:50000
- Period of Survey : February, 2004 to June, 2004
- Base Materials : IRS-1C LISS-III Standard FCC (band 2, 3, & 4). on 1:50000 scale and Survey of India Toposheet (1:50000 scale)
- Total Area of District : 4,54,056.65 ha
- Agro-climatic Zone : Zone "V"
- Geographical Extent : 29° 02' to 29° 50' North Latitude
78° 01' to 78° 55' East Longitude
- Nature, Extent and Percent of Degraded Lands in Bijnor district, Uttar Pradesh

			(Area in ha)	
S. No.	Particulars	Description	Area	Percentage
Normal Lands				
1.	AN	Agriculture Normal	3,62,402.08	79.81
2.	FN	Forest Normal	15,095.89	3.32
3.	PN	Plantation Normal	11,518.89	2.54
Sub Total			3,89,016.86	85.68
Degraded Land				
4.	Wela1	Severe water erosion, plain and agricultural land	2,556.66	0.56
5.	Wela2	Severe water erosion, plain and forest	20,606.10	4.54
6.	We4b2	Shallow ravines (depth <3 m) open scrub / thin vegetation, undulating and forest land	1,360.33	0.30
7.	W11a1	Seasonal (affecting one crop; 4-6 months submergence), plain and agriculture land	4,110.59	0.91
8.	W11a4	Seasonal (affecting one crop; 4-6 months submergence), plain and open scrub land	8,200.23	1.81
9.	Sa5a1	Moderately alkali, plain and agriculture land	897.88	0.20
Sub Total			37,731.79	8.31
Miscellaneous Lands				
10.	H	Habitation (Area under settlement)	8,174.00	1.80
11.	W	Water tank (Area under water body) and River (Area under river)	19134.00	4.21
Sub Total			27308.00	6.01
Total			454056.65	100.00

➤ Salient Features

- ⇒ Total Degraded lands are 37,731.79 ha (8.31%) out of the total area of the district.
- ⇒ The area suffers from severe and very severe water erosion is 23,162 ha (5 %) and 1,360 ha (0.3 %), respectively.
- ⇒ Seasonal water logged affecting one crop covers 12,310.82 ha (2.71%) in flood zone area along the rivers.
- ⇒ Area under salt affected agriculture land is 897.88 ha (0.2%).
- ⇒ About 85% land of the total geographical area of the district is normal.

Description	Area (ha)	Percentage (%)
Plantation Normal		
Forest Normal		
Agriculture Normal		
Sub Total		
Subtotal		
Moderately alkali plain and agriculture		
Seasonal (affecting one crop) flood zone (submergence) plain and agriculture		
Seasonal (affecting one crop) flood zone (submergence) plain and open land		
thin vegetation undulating and hilly		
shallow ravines (depth > 1m) plain and agriculture		
Severe water erosion plain and agriculture		
Severe water erosion plain and agriculture		
Sub Total		
Sub Total		
River (Area under river)		
Water tank (Area under water tank)		
Habitat (Area under settlement)		
Sub Total		
Total		

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