

Report on Demarcation of Priority Microwatersheds of Ningal, Ferozpur, Lower Jhelum, Sukhnag and Viji Dakil Catchments (1E1) of Jhelum Basin in Baramula District of Jammu and Kashmir

ABSTRACT

1. **Survey Area** : Ningal, Ferozpur, Lower Jhelum, Sukhnag and Viji Dakil Catchments of Jhelum Basin in Baramula District of Jammu and Kashmir
2. **Location** : 33^o 46'48" to 34^o 22'48" N Latitude and 73^o 54'00" to 74^o46'48" E Longitude
3. **Total Area** : 2,60,875 ha
4. **Period of field visit** : Sept, 2003
5. **Type of Survey** : Rapid Reconnaissance Survey using Remote Sensing Technique
6. **Base Material** : Survey of India Toposheets (1:50,000) and Geocoded FCC (4, 3, 2) of IRS-D LISS-III

7. Areal Extent of different Erosion Intensity Mapping Units:

S. No.	EIMU	Weightage Value	Delivery Ratio	Area (ha)	Percentage
1	A1	13	0.58	26,122	10.01%
2	A2	12	0.55	21,885	8.39%
3	A3	12	0.56	4,844	1.86%
4	K1	14	0.59	1,530	0.59%
5	K2	16	0.66	12,669	4.86%
6	K3	16	0.67	20,347	7.80%
7	K4	23	0.86	21,753	8.34%
8	K5	20	0.84	12,086	4.63%
9	K6	14	0.61	953	0.37%
10	L1	16	0.74	16,673	6.39%
11	L2	19	0.83	16,407	6.29%
12	L3	21	0.90	34,544	13.24%
13	L4	16	0.73	28,722	11.01%
14	L5	18	0.79	14,841	5.69%
15	L6	21	0.87	12,388	4.75%
16	L7	18	0.75	33	0.01%
17	HA	-	-	459	0.18%
18	WB	-	-	14,619	5.60%
Total		-	-	2,60,875	100.00

8. Hydrological Divisions:

Water Resource Region (1)
 Basin (1E)
 Catchment (1E1)
 Subcatchment (1E1B, 1E1C)
 Watersheds (1E1B4 & 1E1C1)
 Subwatersheds (1E1B4a.b.c....., 1E1C1a, b, c.....)
 Microwatersheds (1E1B4a1..., 1E1B4b1...,)

9. Priority Categorization:

S. No.	Priority Category	No. of Microwatersheds	Area (ha)	Percentage
1	Very High (1300 and above)	192	1,44,110	55.24
2	High (1200-1299)	38	25,077	9.61
3	Medium (1100-1199)	26	15,737	6.03
4	Low (1000-1099)	23	15,354	5.89
5	Very Low (Below 1000)	65	60,597	23.23
Grand Total		344	2,60,875	100.00

10. Soil Erosion Hazard:

S. No.	Erosion Class	Area (ha)	Percentage
1.	Slight erosion	52,851	20.26
2.	Slight to Moderate erosion	19,156	7.34
3.	Moderate erosion	28,722	11.01
4.	Moderate to Severe erosion	64,297	24.65
5.	Severe erosion	59,018	22.62
6.	Severe to Very severe erosion	21,753	8.34
7.	Miscl. Land	15,078	5.78
Total		2,60,875	100.00

11. Salient Features:

- ✓ Ningal, Ferozpur, Lower Jhelum and Viji Dakil Catchments of Jhelum Basin have been subdivided into 344 microwatersheds following the delineation and codification method outlined in Watershed Atlas of India.
- ✓ Out of 2,60,875 hectares surveyed area, 144,110 ha. (55.12%) spread over 192 microwatersheds have been categorized under very high priority and 25,077 ha (9.61%) covered by 38 microwatersheds have been categorized under high priority.
- ✓ About 47.37% of the surveyed area is covered by notified forest, 32.02% is under orchard, 12.66% under agro-horticulture and 18.61% is under cultivation. About 25.92% of the surveyed area is having extremely steep (above 50%) slope and 26.08% area is having steep to very steep slope. Most of these lands are under degraded forest.
- ✓ About 24.65% surveyed area is suffering from moderate to severe erosion and 30.96% surveyed area is susceptible to severe to very severe erosion.