

Report on Demarcation of Priority Microwatersheds in Rad, Ans, Anji Khad and Tawi Khad (Raisi) Rivers of lower Chenab sub catchment (1D1B) of Chenab Basin of Udhampur, Jammu and Riasi Districts, Jammu and Kashmir State.

ABSTRACT

1. *Survey Area* : Rad, Ans, Anji Khad and Tawi Khad(Raisi) rivers sub catchment (1D1B) of Chenab Basin of Udhampur, Jammu and Riasi Districts of Jammu and Kashmir State.
2. *Location* : 32° 41' to 33° 31' N Latitude
74° 29' to 75° 24' E Longitude
3. *Total Area* : 4,20,900 ha
4. *Period of field visit* : May, 2004 to June, 2004
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. *Apical Extent of different Erosion Intensity Mapping Units* :

Sl.No.	Erosion Intensity Mapping Unit	Weightage Value	Delivery Ratio	Area in ha.	Area In %age
1	A01	13	0.58	5947	1.41
2	A02	12	0.55	11462	2.72
3	A03	12	0.56	38922	9.25
4	G01	13	0.59	12978	3.08
5	G02	15	0.66	50121	11.91
6	SC01	15	0.71	20418	4.85
7	SC02	18	0.80	100808	23.96
8	SC03	21	0.89	57933	13.76
9	SC05	14	0.69	409	0.1
10	SC06	16	0.73	14208	3.38
11	SC07	20	0.86	41726	9.91
12	SC08	21	0.85	20835	4.95
13	SC09	17	0.72	7375	1.75
14	SC10	18	0.75	280	0.07
15	SC11	22	0.90	19584	4.65
16	PBC			1515	0.36
17	HA			597	0.14
18	WB			15782	3.75
	Total			420900	100.00

8. *Hydrological Divisions* : Water Resource Region (I)
Basin (1D)
Catchment (1D1)
Subcatchment (1D1B)
Watersheds (1D1B1-5)
Subwatersheds (1D1B1a.b.c....., 1D1B5a, b, c.....)
Micro watersheds (1D1B1a 1, 1D1B1a2.....)

SL. NO.	HYDROLOGIC UNIT	STATE	DISTRICT	EIMU	AREA IN HA.	WEIGHTAGE VALUE	WEIGHTAGE PRODUCT	DELIVERY RATIO	RELATIVE SYI	SEDIMENT YIELD	RELATIVE PRIORITY	PRIORITY CLASS
				SC03	47	21	987	0.89	878			
				Total	377/ 377		5505		3810	1011	530	L
523	1D1B4k4			A03	92	12	1104	0.56	618			
				SC02	3	18	54	0.80	43			
				SC08	306	21	6426	0.85	5462			
		JAMMU & KASHMIR	UDHAMPUR	SC02	20	18	360	0.80	288			
				SC08	1	21	21	0.85	18			
				Total	422/ 422		7965		6429	1524	228	VH
524	1D1B4k5			A03	201	12	2412	0.56	1351			
				SC02	323	18	5814	0.80	4651			
				SC03	41	21	861	0.89	766			
				SC08	276	21	5796	0.85	4927			
				Total	841/ 841		14883		11695	1391	327	VH
525	1D1B4k6			A03	71	12	852	0.56	477			
				SC08	800	21	16800	0.85	14280			
		JAMMU & KASHMIR	UDHAMPUR	SC02	15	18	270	0.80	216			
				SC08	32	21	672	0.85	571			
				Total	918/ 918		18594		15544	1693	93	VH
526	1D1B5a1			A03	47	12	564	0.56	316			
				SC02	6	18	108	0.80	86			
				SC03	175	21	3675	0.89	3271			
				SC08	172	21	3612	0.85	3070			
				WB	6	0	0	0.00	0			
		JAMMU & KASHMIR	UDHAMPUR	SC03	3	21	63	0.89	56			
				WB	6	0	0	0.00	0			
				Total	415/ 403		8022		6799	1687	96	VH
527	1D1B5a2			SC02	203	18	3654	0.80	2923			
				SC08	153	21	3213	0.85	2731			

9. Area wise Priority Categorization under each district: (Area in ha)

Priority Category	JAMMU	RAISI	UDHAMPUR	TOTAL AREA	Area in %age
Very High	1572	181064	78679	261315	62.08
High	1752	18193	2330	22275	5.29
Medium	10497	21763	1016	33276	7.91
Low	7958	23975	299	32232	7.66
Very Low	61966	5673	4163	71802	17.06
Total	83745	250668	86487	420900	100.00

10. Microwatershed wise Priority Categorization under each district: (Area in ha)

Priority Category	JAMMU	RAISI	UDHAMPUR	TOTAL Microwatersheds
Very High	22	1021	434	1477
High	16	102	6	124
Medium	78	125	7	210
Low	62	153	4	219
Very Low	260	40	30	330
Total	438	1441	481	2360

11. Distribution of area under Erosion category:

Sl No	EROSION	JAMMU	RAISI	UDHAMPUR	TOTAL AREA	Area in %age
1	Non to Slight erosion	46526	12818	9965	69309	16.47
2	Slight to Moderate erosion	10743	59794	411	70948	16.86
3	Moderate erosion	4305	9572	331	14208	3.38
4	Moderate to Severe erosion	5790	68667	33726	108183	25.7
5	Severe erosion	3442	95399	41517	140358	33.34
6	Misc	12939	4418	537	17894	4.25
	Total	83745	250668	86487	420900	100.00

12. Salient Features:

- About 4,20,900 ha surveyed area of Lower Chenab Sub-Catchment (4D1B) of Chenab Basin have been subdivided into 5 watersheds, 86 Subwatersheds and 2360 microwatersheds following the delineation and codification method outlined in Watershed Atlas of India.
- Out of ^{total} surveyed area, 2,61,315 ha. (62.08%) spread over 1477 microwatersheds have been categorized under very high priority area and 22,275 ha. (5.29%) covered by 124 microwatersheds have been categorized under high priority area.
- About 55.96% of the surveyed area is under deciduous forest and 32.35% is under cultivation. About 42.56% of the surveyed area are having extremely steep (above 50%) slope most of which are degraded forest.
- About 33.34 % surveyed area is susceptible to severe erosion.