

Report on Prioritisation of Micro-Watershed in Indravati R.V.P Catchment (Part of 4E2 Catchment) Bastar district of Chhattisgarh

ABSTRACT

1. **Survey area** : 4E2C5, 4E2C6 & 4E2F2 Watersheds of Indravati catchment, Bastar district of Chhattishgarh .
2. **Total area mapped** : 2, 81,000 ha.
3. **Geographical Locations** : 4E2C5 & 4E2C6 Watersheds lie between parallels of $19^{\circ}10'$ to $19^{\circ}33'$ N latitude and meridians of $80^{\circ}58'$ to $81^{\circ}29' 30''$ E longitudes And 4E2F2 Watershed lies between parallels of $18^{\circ}35'$ to $19^{\circ}02'$ N latitude and meridians of $81^{\circ}13'$ to $81^{\circ}46'$ E longitudes
4. **Agro Climatic Region** : Eastern Plateau & Hills (Zone No.7) as per Planning Commission.
5. **Type of Survey** : Rapid Reconnaissance Survey.
6. **Period of Survey** : December'2000 to April ' 2001
7. **Base map used** : Survey of India Toposheet on 1:50,000 scale

8. Extent of areas under different Erosion Intensity Mapping Units

Sl.No.	EIMU	Weightage Value	Delivery Ratio	Area(ha.)	Area(%)
1	C1	17	0.67	168	0.06%
2	C2	15	0.65	63473	22.59%
3	C3	16	0.70	16851	6.00%
4	C4	16	0.72	1858	0.66%
5	C5	15	0.65	5120	1.82%
6	C6	16	0.68	1066	0.38%
7	C7	16	0.68	595	0.21%
8	C8	17	0.64	2391	0.85%
9	C9	15	0.54	15887	5.65%
10	C10	15	0.59	147	0.05%
11	C11	15	0.52	11455	4.08%
12	C12	17	0.73	3198	1.14%
13	C13	15	0.65	3069	1.09%
14	C14	16	0.68	42	0.01%
15	C15	12	0.56	62849	22.37%
16	C16	13	0.58	15977	5.69%
17	C17	14	0.61	2792	0.99%
18	C18	14	0.61	599	0.21%
19	C19	13	0.60	11515	4.10%
20	C20	18	0.70	597	0.21%
21	C21	14	0.61	2355	0.84%
22	C22	15	0.64	1890	0.67%
23	C23	16	0.76	2896	1.03%
24	C24	11	0.53	1197	0.43%
25	GN1	13	0.72	231	0.08%
26	GN2	16	0.79	645	0.23%
27	GN3	16	0.77	462	0.16%
28	GN4	13	0.62	24513	8.72%
29	GN5	15	0.63	6683	2.38%

Sl.No.	EIMU	Weightage Value	Delivery Ratio	Area in ha.	Area (%)
30	GN6	17	0.69	1637	0.58%
31	GN7	16	0.67	6583	2.34%
32	GN8	15	0.64	1857	0.66%
33	GN9	15	0.70	53	0.02%
34	GN10	16	0.71	452	0.16%
35	A1	16	0.65	5929	2.11%
36	A2	18	0.72	827	0.29%
37	RI (River)	0	0.00	1780	0.63%
38	HA (Habitation)	0	0.00	1321	0.47%
39	W (Water body)	0	0.00	40	0.01%
Grand Total				281000	100.00

9. Priority Categorisation

Sl.No	Priority Category & Range	No.of Microwatersheds	Area (ha.)	%
1	Very High (above 1100)	2	722	0.26
2	High (1000-1099)	31	19357	6.89
3	Medium (900-999)	128	91701	32.63
4	Low (800-899)	152	109554	38.99
5	Very Low (Below 800)	86	59666	21.23
Grand Total		399	281000	100.00

10. Sub-Catchment and Watershed wise distribution of area under different Priority Categories

Sl. No.	Priority Category & Range	4E2C				Sub Total	4E2F		Grand Total
		4E2C5		4E2C6			4E2F2		
		No. of M/W	Area(ha)	No. of M/W	Area(ha)		No. of M/W	Area(ha)	
1.	Very High (above 1100)	1	370	-	-	370	1	352	722
2.	High (1000-1099)	11	7254	7	4604	11858	13	7499	19357
3.	Medium (900-999)	39	25054	49	35517	60571	40	31130	91701
4.	Low (800-899)	48	30177	50	34957	65134	54	44420	109554
5.	Very Low (Below 800)	30	18145	32	19922	38067	24	21599	59666
Grand Total		129	81000	138	95000	176000	132	105000	281000

11. Salient Features of the area:

The survey area consists of 399 micro-watersheds, spreading over 2, 81,000 ha. Out of the total, only 2 micro-watersheds come under very priority, covering only 722 ha. (0.3 % land) and 31 micro-watersheds are in high priority (19357 ha. Or 6.9 % land), leaving all other micro-watersheds under medium to very low priority. The study also reveals that very high priority micro-watersheds fall in 4E2C5 and 4E2F2 watersheds and all high priority micro-watersheds are shared by all three watersheds of the area.

Major area (75.9 % land) is under forest which is followed by agriculture (17.5 %), open scrub (2.06 %) waste and barren land (1.94 %) and shrubs or bushes (1.3 %) respectively.

Moderately eroded and moderate to severely eroded lands together constitute 83.6 percent of the survey area which requires urgent soil and water conservation measures.

Very shallow to shallow and shallow to moderately deep soils occupy 1.15 % and 35 % of the survey area respectively.

Moderate to strong and strong to steep slope lands, together cover 33 % of the whole area. These lands are unfavorable for agriculture practices.

Nearly 4.6 % of the area is unmanaged and 16.7 % of land is poorly managed which need appropriate conservation measures and integrated land use management.