

Report on Prioritization of Microwatersheds in 4E2A (Confluence with Godavari to Lower Right Bank of Indravati) Sub Catchment of 4E2(Indravati) RVP Catchment in Bastar, Kanker and Rajnandgaon districts of Chhattisgarh and Garhchiroli District of Maharashtra

ABSTRACT

1. **Survey Area** : 1. 4E2A Sub Catchment of 4E2 (Indravati RVP)
2. Watersheds: 4E2A 1-7
2. **Location** : a) Latitude- $18^{\circ} 43' 30''$ to $20^{\circ} 16' N$
b) Longitude- $80^{\circ} 4' 30''$ to $80^{\circ} 38' 45'' E$
c) Agroclimatic Region- Eastern Plateau-Hill Region(VII)
d) Soil Conservation Region-Eastern Red Soil Region(8)
e) Watershed Atlas of India(1990)
- Water resource region – (4 All drainage flowing into Bay of Bengal except those at 2 and 3 or Ganges and Brahmaputra).
Basin- 4E (Godavari)
Catchment – 4E2 (Indravati)
Sub Catchment - 4E2A (Confluence with Godavari to Lower right bank)
Watershed- 4E2A 1-7
3. **Total Area** : 4, 53,305 ha.
4. **Type of Survey** : Rapid Reconnaissance Soil Survey for Priority delineation
5. **Period of Survey** : Nov. 2000 to March, 2001
6. **Base Map** : Survey of India topographical maps of 1: 50,000 scale
7. **Hydrological Sub-division:**
- a) Catchment : 4E2
b) Sub Catchment : 4E2A
c) Watersheds : 4E2A1-7
d) Sub-watersheds : 109
e) Microwatersheds : 651

8. Areal extent of various erosion intensity mapping units of 4E2A Sub Catchment

Sl. NO.	Parent Material	Mapping Unit	Weightage Value	Delivery Ratio	Area in ha.	Percentage of the Total
1.	Alluvium	A1	17	0.67	1516	0.3
2.	Basalt	B1	14	0.70	9460	2.1
3.	-do-	B2	11	0.61	8926	2.0
4.	-do-	B3	14	0.62	32644	7.2
5.	-do-	B4	17	0.70	2123	0.5
6.	-do-	B5	13	0.58	1356	0.3
7.	Sand stone	S1	15	0.67	604	0.1
8.	-do-	S2	14	0.70	27308	6.0
9.	-do-	S3	13	0.66	15724	3.5
10.	-do-	S4	11	0.61	748	0.2
11.	-do-	S5	11	0.59	62701	13.8
12.	-do-	S6	15	0.64	5654	1.2
13.	-do-	S7	13	0.58	21701	4.8
14.	-do-	S8	13	0.63	233755	51.6
15.	-do-	S9	13	0.58	21272	4.7
	Total				4,45492	98.3
	Miscellaneous				7813	1.7
	Grand total				453305	100 %

9. Gradation of Micro watersheds into priority categories of 4E2A sub Catchment

Sl. No.	Priority Category	SYI Value	No. of Micro Watershed	Area (ha.)	Percentage
1.	Very High	1100& above	1	384	0.1
2.	High	1000-1099	2	937	0.2
3.	Medium	900-999	31	20367	4.5
4.	Low	800-899	366	256586	56.6
5.	Very low	Below 800	251	175031	38.6
		Total	651	453305	100 %

10. Watershed wise distribution pattern of priority Microwatersheds categories of 4E2A Subcatchment.

Sl. No.	Watershed Code	Priority Categories Number/Area in ha./Percentage					Total
		Very High	High	Medium	Low	Very low	
1.	4E2A1	384 0.1	937 0.2	10810 2.4	68237 15.1	17085 3.7	97453 21.5
2.	4E2A2	-	-	5910 1.3	4465 1.0	4406 1.0	14781 3.3
3.	4E2A3	-	-	1385 0.3	45859 10.1	32264 7.1	79508 17.5
4.	4E2A4	-	-	1964 0.4	27192 6.0	24348 5.4	53504 11.8
5.	4E2A5	-	-	298 0.1	27701 6.1	27721 6.1	55720 12.3
6.	4E2A6	-	-	-	53418 11.8	23960 5.3	77378 17.1
7.	4E2A7	-	-	-	29714 6.5	45247 10.0	74961 16.5
No. of micro watersheds		1	2	31	366	251	651
Total / Percentage		384 0.1	937 0.2	20367 4.5	256586 56.6	175031 38.6	453305 100 %

11. District wise distribution of priority area (ha.) in 4E2A Sub Catchment with percentage.

S. No.	Priority Grading	Chhattisgarh									Maharashtra			Grand Total & Percentage
		Bastar			Kanker			Rajnandgaon			Garhchiroli			
		Full	Part	Area in ha/%	Full	Part	Area in ha/%	Full	Part	Area in ha/%	Full	Part	Area in ha/%	
1.	Very High 1100 & above	-	-	-	-	-	-	-	-	-	1	-	384 0.1	384 0.1
2.	High 1000 – 1099	-	-	-	-	-	-	-	-	-	2	-	937 0.2	937 0.2
3.	Medium 900-999	-	-	-	-	-	-	-	-	-	31	-	20367 4.5	20367 4.5
4.	Low 800-899	4	902 0.2	8	24	10362 2.3	7	6	6575 1.5	322	24	238747 52.7	256586 56.6	
5.	Very Low Below 800	2	2790 0.6	6	14	9344 2.1	16	9	10542 2.3	203	23	152355 33.6	175031 38.6	
Total / Percentage		2	6	3692 0.8	14	38	19706 4.3	23	15	17117 3.8	559	47	412790 91.1	453305 100