


Report on Prioritisation of Microwatersheds in Upper Kolab
 (4E1D1 to 4E1D5) RVP catchment, district Bastar (M.P.)
 and Koraput (Orissa)

A B S T R A C T

01. Survey area Upper Kolab Catchment
 (4E1D1 to 4E1D5 Watersheds)
 Bastar (M.P.) and Koraput
 (Orissa)
02. Location  18°18' to 19°04' NL
 81°41' to 82°40' EL
03. Total area 3,75,677 ha (including 5431
 5431 ha under roads, streams
 habitation, etc)
04. Period of survey Decembember 1997 to March 1998
05. Type of survey Rapid reconnaissance survey
06. Base material Survey of India topographical
 maps (1:50,000)
07. Hydrological division
 a) Catchment Upper Kolab (4E1)
 b) Watershed 5 (4E1D1 to 4E1D5)
 c) Microwatersheds 452
08. Priority categorisation

Sr. No.	Priority category	SYI range	No. of MWS	Area (ha)	Percent
1.	Very high	1300 & above	11	10,835	2.9
2.	High	1200 - 1299	11	8,658	2.3
3.	Medium	1100 - 1199	99	80,942	21.5
4.	Low	1000 - 1099	151	1,25,305	33.4
5.	Very low	Below 1000	180	1,44,506	38.5
Total			452	3,70,246	98.6
Misc. land				5,431	1.4
Grand total				3,75,677	100.0

09. Erosion intensity mapping units and their extent (ha)

Sr. No.	Erosion Intensity mapping units	Area (ha)	Percent
01.	A1	11,672	3.1
02.	A2	11,432	3.0
03.	A3	658	0.2
04.	A4	4,171	1.1
05.	A5	12,564	3.3
06.	CK1	7,480	2.0
07.	CK2	3,102	0.8
08.	CK3	12,563	3.3
09.	CK4	19,056	5.1
10.	CK5	4,853	1.3
11.	CK6	6,287	1.7
12.	CK7	46,486	12.4
13.	CK8	6,064	1.6
14.	CK9	2,581	0.7
15.	CK10	6,643	1.8
16.	CK11	18,729	5.0
17.	CK12	8,386	2.2
18.	CK13	50,699	13.5
19.	CK14	29,957	8.0
20.	CK15	14,991	4.0
21.	D1	369	0.1
22.	D2	81	-
23.	S1	3,224	0.9
24.	S2	4,407	1.2
25.	S3	4,138	1.1
26.	S4	1,052	0.3
27.	S5	1,304	0.1
28.	S6	404	0.1
29.	S7	4,765	1.3
30.	SL1	8,260	2.2
31.	SL2	13,144	3.5
32.	SL3	14,765	3.9
33.	SL4	17,023	4.5
34.	SL5	5,921	1.6
35.	SL6	3,259	0.9
36.	SL7	2,756	2.6
	Total	3,70,246	98.6
	Misc. land (River, road, hab etc.)	5,431	1.4
	Grand total	3,75,677	100.0

10. Distribution of area under different soil depth classes

Sr. No.	Particulars	Area (ha)	Percent
1.	Shallow to moderately deep (EIMU S2,S5,S6,SL6,CK2)	12,476	3.3
2.	Moderately deep (EIMU D1,SL2,SL7,CK5,CK&)	74,608	19.9
3.	Moderately deep to deep (EIMU D2,SL1,SL3,SL4,SL5CK6)	52,337	13.9
4.	Deep (EIMU CK8,CK10,CK13)	63,406	16.9
5.	Deep to very deep (EIMUS1,3,4,7,CK1,9,11,12,14, A3,4)	85,141	22.7
6.	Very deep (EIMU CK3,4,15, A1,2,5)	82,278	21.9
Total		3,70,246	98.6
Misc. land		5,431	1.4
Grand total		3,75,677	100.0

11. Distribution of area under different slope classes

Sr. No.	Particulars	Area (ha)	Percent
1.	Nearly level to very gently sloping, slope modified upto 0.5%) (EIMU A5)	12,564	3.3
2.	Very gently to gently sloping (1-5%) (EIMU S1,2,3,4,SL4,5,6,7,CK1,2,3,4,12, 13,14,A2,3,4)	1,96,284	52.3
3.	Very gently to gently (1-5%) sloping modified to 0.5% (EIMU S7 and CK15)	19,756	5.3
4.	Gently to moderately sloping (3-10%) (EIMU D2,A1)	11,753	3.1
5.	Moderately to strongly sloping (5-15%) (EIMU SL2)	13,144	3.5
6.	Strongly sloping (10-15%) (EIMU CK5,CK6)	11,140	3.0
7.	Moderately steep to steep sloping (15-33%) (EIMU D1,S5,6,SL1,CK7,8,9,10,11)	90,840	24.2
8.	Steep to very steeply sloping (25-50%) (EIMU SL3)	14,700	3.9
Total		3,70,246	98.6
Misc. land		5,431	1.4
Grand Total		3,75,677	100.0

12. Distribution of area under different soil textural

Sr. Soil Texture No.	Area (ha)
1. Coarse loamy (EIMU s6)	404
2. Coarse loamy to fine loamy (EIMU S1,2,4,5,7,CK1,7,9,10,13, A1,2,3,4)	1,56,574
3. Fine loamy (EIMUS3,SL5)	10,059
4. Coarse loamy to fine (EIMU CK15)	14,991
5. Fine loamy to fine (EIMUSL1,2,4,7,CK2,3,4,5,6,8,11,12,14,A5)	1,69,744
6. Fine (EIMUD1,2)	450
7. Clayey skeletal (EIMU SL3)	14,765
8. Gravelly fine silty (EIMU SL6)	3,259
Total	3,70,246
Misc. Land	5,431
Grand Total	3,75,677

13. Distribution of area under different classes

Sr. No.	Particulars	Area (ha)
1.	None to slight erosion (EIMU S7,CK15,A1,2,3,4,5)	60,253
2.	Slight to moderate erosion (EIMU S4, CK14)	31,009
3.	Moderate erosion (EIMU SL5,CK1,8,12)	27,851
4.	Moderate to severe erosion (EIMU D1,2,SL1,2,3,5,6,SL2,3,4,7, CK2,3,4,5,6,7,9,10,11,13)	2,39,614
5.	Severe erosion (EIMU SL1,6)	11,519
Total		3,70,246
Misc. Land		5,431
Grand Total		3,75,677