

**REPORT ON DEMARCATION OF PRIORITY MICRO-WATERSHEDS IN
5A2A2 AND 5A2B4 WATERSHEDS (RVP) OF ALIYAR AND
PARAMBIKULAM SUBCATCHMENT, COIMBATORE, TAMILNADU AND
PALGHAT AND TRICHUR, KERALA STATE**

ABSTRACT

1. Survey Area	5A2A2 and 5A2B4 watersheds (RVP) of Aliyar and Parambikulam Dam, Coimbatore district, Tamilnadu and Palghat and Trichur districts, Kerala State
2. Location	5A2A2 watershed 10°15'45" to 10°33'50" N Latitude 76°33'30" to 77°04' E Longitude 5A2B4 watershed 10°18'50" to 10°52' N Latitude 76°20'55" to 77°12'45" E Longitude
3. Total Area Surveyed	238278 ha
4. No. of Microwatersheds	243
5. Agro Climatic Region	10 & 12
6. Type of Survey	RR survey for priority delineation
7. Period of Survey	December 2003 to 6 th Feb. 2004
8. Base Maps	1:50,000 scale Survey of India topographic maps
9. Toposheets	58 F/2,3 58 B/5,6,9,10,11,14,15
10. Hydrological Divisions	
a) Region	5
b) Basin	A
c) Catchment	5 A2
d) Subcatchment	5A2A and 5A2B
e) Watersheds	2 (5A2A2 and 5A2B4)

11. Extent of area of different Erosion Intensity Mapping Units

Sl.No	EIMU	Weightage Value	Delivery Ratio	Area in ha.	Area	SI	EIMU	Weightage Value	Delivery Ratio	Area	Area
					(%)	No.				in ha.	(%)
1	G3.4	14	0.69	2702	1.13	22	G26.11	13	0.58	276	0.12
2	G5.11	15	0.71	1591	0.67	23	G26.12	12	0.55	429	0.18
3	G5.12	16	0.68	128	0.05	24	G26.13	12	0.56	10955	4.6
4	G7.3	13	0.61	2570	1.08	25	G26.14	12	0.57	96	0.04
5	G7.4	12	0.88	9079	3.81	26	G26.15	13	0.56	24575	10.3
6	G7.5	13	0.63	729	0.31	27	G28.3	13	0.58	3265	1.37
7	G7.6	16	0.73	3748	1.57	28	G41	16	0.9	11321	4.75
8	G7.7	12	0.57	341	0.14	29	G41.1	14	0.82	19682	8.26
9	G8.9	13	0.65	381	0.16	30	G41.2	13	0.63	39226	16.5
10	G12.10	14	0.6	3043	1.28	31	G42	13	0.63	24318	10.2
11	G12.11	14	0.61	264	0.11	32	G43	14	0.63	7808	3.28
12	G12.12	15	0.53	288	0.12	33	G44	13	0.6	1072	0.45
13	G12.14	14	0.61	118	0.05	34	LT2.2	11	0.54	9288	3.9
14	G14.5	15	0.69	1404	0.59	35	LT8.1	13	0.61	1567	0.66
15	G14.6	15	0.68	240	0.1	36	LT9.1	12	0.55	1953	0.82
16	G14.7	14	0.6	49	0.02	37	LT11	12	0.58	1560	0.65
17	G15.3	15	0.63	1998	0.84	38	Habit	0	0	2185	0.92
18	G18.6	16	0.68	33	0.01	39	Reser	0	0	3349	1.41
19	G22.2	15	0.63	331	0.14	40	River	0	0	3630	1.52
20	G26.8	11	0.53	40393	17	41	ROC	0	0	1488	0.62
21	G26.9	13	0.57	202	0.08	42	Tank	0	0	603	0.25
									Grand Total	238278	100

12. Distribution of number of microwatersheds and area under different priority categories

S. No.	Priority Category	No. of Microwatersheds	Area in ha.	Area Percentage
1	Very High(1300 and above)	2	1980	0.83
2	High (1200-1299)	5	5366	2.25
3	Medium (1100-1199)	7	6180	2.59
4	Low (1000-1099)	23	20702	8.69
5	Very Low (Below 1000)	206	204050	85.64
	Grand Total	243	238278	100.00

13.State and district wise area and number of microwatersheds under different priority categories

S. No.	Priority Category	Kerala State		Tamilnadu State	
		PALAKKAD	THRISSUR	COIMBATORE	Total
1	Very high	0	0	1980(2)	1980(2)
2	High	0	0	5366(5)	5366(5)
3	Medium	1380(1)	0	4800(6)	6180(7)
4	Low	3080(4)	24	17598(19)	20702(23)
5	Very low	95441(90)	13336(17)	95273(99)	204050(206)
	Grand Total	99901(95)	13360(17)	125017(131)	238278(243)

* indicates one microwatersheds occupying more than one district

14. Area under different groups of soil erosion hazard

S.NO.	Erosion	Area	Area Percentage
1	None to slight erosion	178052	74.72
2	None to slight to Moderate erosion	32690	13.72
3	Moderate erosion	4399	1.85
4	Moderate to Severe erosion	11882	4.99
5	Misc.	11255	4.72
	Grand Total	238278	100.00

15. Salient features

- a. Out of the total surveyed area 2 micro watersheds have been categorized as very high priority covering an area of 1980 ha (0.83%) and 5 microwatersheds have been categorized as high priority covering an area of 5366 ha (2.25%)
- b. In the area surveyed red soils have the maximum area of 222424 ha covering (93.3%) and black soils have the least area of 607 ha extent 0.3%.mixed soils have the area of 3992 ha(1.7%).
- c. Distribution of area under different land use categories shows maximum area under forest, 105402 ha (44.23%) followed by area under orchards 45313 ha (19.02%), multiple crop cultivation 37735 ha (15.84%), estates 19169 ha (8.04%), scrub lands 13040 ha (5.47), other lands 11255 ha (4.72%) and least 6364 ha (2.67%), single crop cultivation.