

"Report on detailed Soil Survey and Land Use of Ka3a, Ka3f, Ka3g, Ka3j and Ka4v subwatersheds of Kabini catchment in Manantavadi, Sultan Bettery and Vayithiri taluks, Wynod district, Kerala State.

ABSTRACT

1. Surveyed area : Ka3a, Ka3f, Ka3g, Ka3j and Ka4v subwatersheds of Kabini catchment in Manantavady, Sultan Bettery and Vayithiri taluks of Wynod district, Kerala State.
2. Total area mapped and reported : 21960 hectares in 23 villages
3. Agro climatic zone : 12
4. Period of work : November 91 to June 1992
5. List of Villages :

Sl. No.	Name of the Villages	Area falling neither the subwatersheds					Total
		Ka3a	Ka3f	Ka3g	Ka3j	Ka4v	
1	Alattil	-	-	470	-	-	470
2	Arjukunnu	248	-	-	-	-	248
3	Chengadam	-	155	-	-	-	155
4	Cherukara	-	-	-	-	82	82
5	Cherukattur	730	-	-	-	-	730
6	Edachena	391	108	-	-	-	499
7	Edavaka	649	466	-	-	-	1115
8	Irrimanatur	-	-	72	292	-	364
9	Kammana	647	-	-	-	-	647
10	Karingari	12	-	-	-	-	12
11	Kommiot	66	-	-	-	-	66
12	Kunjam	-	-	-	1755	-	1755
13	Kunnumangala	363	-	-	-	-	363
14	Mangalasseri	-	533	-	-	38	571
15	Ollakkad	668	-	-	-	-	668
16	Padinjarathara	-	-	-	-	2716	2716
17	Periya	-	-	983	-	-	983
18	Pullicad	799	-	-	-	-	799
19	Payingattri	238	-	-	-	-	238
20	Tondernad	-	1486	-	2906	-	4392
21	Valat	-	-	1122	361	-	1483
22	Varayal	-	-	908	-	-	908
23	Vellamunda	-	324	-	-	2372	2696
Total		4811	3072	3555	5314	5208	21960

5. Soil series mapped and area in hectares under each subwatershed

Sl. No.	Soil series name	Subwatersheds and area in hectares					Total	%
		Ka3a	Ka3f	Ka3g	Ka3f	Ka4v		
1	Alattil	413	650	676	1745	795	4279	19.5
2	Edachana	991	137	48	18	444	1638	7.4
3	Kabini	129	27	111	188	39	494	2.2
4	Ladysmith	-	299	781	1646	-	2726	12.4
5	Mandankutty	1586	805	236	421	1092	4140	19.9
6	Nallurnad	1165	574	26	13	634	2412	11.0
7	Pinnongod	21	-	929	370	69	1389	6.3
8	Tariod	2	20	-	-	1094	1116	5.1
9	Valat	10	-	110	91	455	666	3.0
10	Vattoli	-	-	534	473	-	1007	4.6
11	Vanniyottu	372	518	12	176	185	1263	5.8
	Miscellaneous	122	42	92	173	401	830	3.8
Total		4811	3072	3555	5314	5208	21960	100
		21.9	14.0	16.2	24.2	23.7	100	

6. Area under different land capability classes

Sl. No.	Land capability unit	Area in hectare	Percentage	Soil series
1	II	5204	23.7	Edachana, Kabini, Mundankutty, Valat
2	III	2891	13.2	Alattil, Kabini, Mundankutty, Nallurnad, Valat.
3	IV	5962	27.1	Alattil, Ladysmith, Mundankutty, Nallurnad, Pinnongod, Tariod, Valat
4	VI	3203	14.6	Alattil, Nallurnad, Pinnongod, Tariod
5	VII	405	1.8	Alattil, Tariod
6	VIII	235	1.1	Tariod
	Forest	3230	14.7	Ladysmith, Nallurnad, Tariod
	Miscellaneous	830	3.8	
Total		21960		

7. Specific problematic area:-

- Moderate erosion on slopes 3-10% on moderately deep to deep = 1293 hect.
- Moderate erosion on slopes above 10% on moderately deep to deep = 10343 hect.
- Severe erosion = 675 hect.
- Rockiness = 1392 hect.