

REPORT ON DETAILED SOIL SURVEY AND LAND USE OF Ka3d, Ka4b and Ka4g SUBWATERSHEDS OF KABINI CATCHMENT IN MANANTHWADI, SULTAN BATTERY TALUKS, WAYNAD DISTRICT, KERALA.

i .ABSTRACT

1. Surveyed area : Ka3d, Ka4b and Ka4g subwatersheds Kabini catchment in Mananthwadi, Sultan Battery taluks, Waynad district, Kerala.
2. Locational coordinates : 11^o 36' to 11^o 45 North latitudes, 75^o 54' to 76^o 17' East longitudes
3. Toposheet index : 58 A2 and 58 A/6 Survey of India topographic maps.
4. Total area : 11094 hectares
5. Period of survey : Nov. 1992 to June 1993
6. Kind of survey : Detailed soil survey
7. Base maps : Cadastral maps on 1:7920 scale
8. Extent of soil series mapped & area covered under each series.

Sl. No. series	Subwatersheds			Total area (ha)	Percent- age
	Ka3d	Ka4b	Ka4g		
1. Alattil	22	824	467	1313	11.8
2. Ambalavayal	415	618	364	1397	12.6
3. Kalpatta	-	14	123	137	1.2
4. Ladysmith	3	1457	2	1462	13.2
5. Mundankutty	103	992	546	1641	14.8
6. Narivayal	665	316	279	1260	11.4
7. Pinnongod	621	-	-	621	5.6
8. Sultanbattery	61	879	54	994	9.0
9. Valat	31	222	202	455	4.1
10. Vatoli	527	600	405	1532	13.8
Miscellaneous	50	103	129	282	2.5
Total	2498	6025	2571	11094	100.0

11. Salient features:

- a. Very deep soils cover an area of 10,220 hectares constituting 92.1% of the total area out of which an area of 3,129 ha occurs on 10-15% slope whereas 477 hectares is more than 15% slope.
- b. An area of 7752 hectares constituting 70% of the total area suffers from moderate erosion whereas 2 hectares of area from severe erosion.
- c. There are 10 soil series established in the surveyed area out of which 8 soil series comprises very deep soils and 2 soil series comprise deep soils.
- d. Miscellaneous lands cover an area of 282 hectares constituting 2.5% of the total area surveyed.