

Report on detailed soil survey and land use of Td4a, Td4b, Td5a, Td5b and Td5j subwatersheds of 'Td' subcatchment of Tungabhadra catchment in Mundargi and Shirhatti taluks of Dharwad district, Karnataka State.

ABSTRACT

1. Surveyed area : Td4a, Td4b, Td5a, Td5b and Td5j subwatersheds of Tungabhadra catchment, Dharwad, Karnataka
2. Period of survey : November 1989 to March 1990
3. Total area mapped : 19,146 hectares
4. Kind of survey : Detailed soil survey
5. Agroclimatic zone :
6. Agroclimatic region :
7. Soil series mapped and area in ha. under each soil series

Sl. No.	Name of the Soil series	Total area in hectare & (%)	Distribution of area under different subwatersheds and their percentage				
			Td4a (%)	Td4b (%)	Td5a (%)	Td5b (%)	Td5j (%)
1.	Devlapur	261 1.4	27 0.52	21 0.38	111 6.08	102 4.13	-
2.	Dyampur	3104 16.2	444 8.51	1054 19.18	403 22.08	187 7.56	1016 24.57
3.	Hebbal	1823 9.5	579 11.10	679 12.35	125 6.85	404 16.34	36 0.87
4.	Hosalli	477 2.5	199 3.81	123 2.24	117 6.41	38 1.54	-
5.	Kallur	459 2.4	148 2.80	65 1.18	-	38 1.54	210 5.08
6.	Kotihal	215 1.12	126 2.40	12 0.22	77 4.22	-	-
7.	Lakshmapur	568 3.00	220 4.22	223 4.06	-	125 5.06	-
8.	Mainehalli	2729 14.3	769 14.74	900 16.38	214 11.73	82 3.32	764 18.48
9.	Manglapur	112 0.6	-	-	-	112 4.53	-
10.	Thimmapur	4774 24.9	1448 27.75	802 14.59	157 8.60	501 20.27	1866 45.13
11.	Varadapur	1098 5.7	270 5.17	536 9.75	72 3.94	150 6.47	60 1.45
12.	Wadagenahalli	1920 10.0	400 7.67	600 12.01	316 17.32	499 20.18	45 1.08
	Miscellaneous	1606 8.4	350 11.31	421 7.66	233 12.77	224 9.06	138 3.34
		19,146	5210	5496	1825	2472	4135

8. Area under different land capability classes

Sl. No.	Land capability classes	Total area in ha. (%)	Distribution of area under different subwatersheds and their percentage					Soil series
			Td4a (%)	Td4b (%)	Td5a (%)	Td5b (%)	Td5j (%)	
1.	II	5181 27.06	1581 30.30	1448 26.35	250 13.70	965 39.04	937 22.66	Deviapur, Dyampur, Hosahalli, Kallur, Lakshapur
2.	III	8052 42.06	2214 42.43	2200 40.03	883 48.38	877 35.48	1878 45.42	Dyampur, Hebbal, Kallur, Kotihal, Mainahalli, Thimmapur, Wadagenahalli
3.	IV	3235 16.90	700 13.42	891 16.21	276 15.12	246 9.95	1122 27.13	Dyampur, Hebbal, Kallur, Kotihal, Mainahalli, Thimmapur, Varadapur, Wadagenahalli
4.	VI	340 1.78	28 0.53	170 3.09	50 2.74	77 3.11	15 0.36	Varadapur
	Afforestation	732 3.82	105 2.01	366 6.66	133 7.29	83 3.36	45 1.09	Deviapur, Varadapur
	Miscellaneous land	1696 8.38	590 11.31	421 7.66	233 12.77	224 9.06	138 3.34	
	Total	19146	5216	5496	1825	2472	4135	

9. Subwatershedwise specific problematic area (ha.)

Sl. No.	Problems	Subwatersheds					Total
		Td4a	Td4b	Td5a	Td5b	Td5j	
1.	Moderate erosion on above 3% slope on moderately deep, deep and very deep soils	1853	1728	733	585	1864	6763
2.	Shallowness	270	536	72	160	60	1098
3.	Severe erosion	586	891	276	260	1122	3135
4.	Cravelliness	*291	*192	*187	*77	*60	*807
5.	Rockiness	*105	*366	*22	*83	*45	*621
	Total	2709	3155	1121	1005	3046	10996

* An area of 1428 hectares is having more than one problem but has been taken into account only once in total problematic area.