

REPORT ON DETAILED SOIL SURVEY AND LAND USE OF Ta4f, Ta4m, Tb1b, Tb3a, Tb4c, Tb4d and Tb6a SUBWATERSHEDS OF 'Ta' and 'Tb' SUBCATCHMENTS IN TUNGABHADRA CATCHMENT OF HAGARIBOMMANAHALLI, KUDLIGI TALUKS OF BELLARY DISTRICT, RON TALUK OF DHARWAD DISTRICT, KOPPAL AND YELBURGA TALUKS OF RAICHUR DISTRICT IN KARNATAKA STATE.

i. ABSTRACT

1. Surveyed area : Ta4f, Ta4m, Tb1b, Tb3a, Tb4c Tb4d and Tb6a subwatersheds of 'Ta' and 'Tb' subcatchments of Tungabhadra catchment in Hagaribommanahalli, Kudligi Ron, Koppal and Yelburga taluks of Bellary, Dharwad and Raichur districts, Karnataka.
2. Total area mapped and reported : 22,405 hectares
3. Period of work : November 1990 to March 1991
4. Kind of survey : Detailed soil survey
5. No. of villages : 50
6. Agro climatic zone : Northern dry zone of Karnataka
7. Soil series mapped and area in hectares under each.

Sl. No.	Name of the soil series	Subwatershedwise area in ha. %							Total area in ha. & (%)
		Ta4f	Ta4m	Tb1b	Tb3a	Tb4c	Tb4d	Tb6a	
1.	Devlapur	264 13.4	368 19.6	1675 39.7	371 22.8	341 10.7	110 2.1	449 10.8	3598 16.1
2.	Dyampur	-	-	-	194 11.9	-	-	-	194 0.9
3.	Kallur	-	-	-	-	-	-	243 5.8	243 1.1
4.	Mainahalli	-	-	-	293 18.1	-	-	-	293 1.3
5.	Manglapur	-	-	287 6.8	-	964 30.4	998 18.9	444 10.8	2693 12.0
6.	Sompur	-	-	-	154 9.5	-	-	65 1.6	219 1.0
7.	Thimmapur	-	-	-	208 12.8	168 5.3	110 2.1	2412 58.1	2898 12.9
8.	Uppanayakanahalli	649 33.0	498 25.0	223 5.3	-	408 12.9	753 13.8	76 1.8	2587 11.5
9.	Varadapur	147 7.5	335 16.9	63 1.3	-	45 1.4	803 15.2	-	1393 6.2
10.	Wadagenahalli	760 38.6	638 32.2	1618 38.4	286 17.6	1107 34.9	2378 44.9	291 7.0	7078 31.5
11.	Miscellaneous	148 7.5	126 6.3	349 8.3	118 7.3	140 4.4	160 3.0	168 4.1	1209 5.4
		1968 100%	1985 100%	4215 100%	1624 100%	3173 100%	5292 100%	4148 100%	22405 100%

## 6. Area under different land capability classes

Sl. No.	Land capability classes	Area in hectare	Percentage (%)	Soil series under land capability classes
1.	II	11602	51.8	Devlapur, Dyampur, Kallur, Manglapur, Thimmapur, Uppanayakanahalli
2.	III	7723	34.4	Kallur, Thimmapur, Wadagenahalli, Mainahalli
3.	IV	1782	8.0	Kallur, Sompur, Thimmapur, Varadapur, Wadagenahalli, Mainahalli
4.	VI	89	0.4	Varadapur
	* Miscellaneous	1209	5.4	
	Total	22405	100%	

\* Miscellaneous lands include area under village site, road, nala, river tank, R.O.C. Reserve forest etc.

## 7. Salient features and specific problematic area

- a) Ten soil series are met within the surveyed area but Wadagenahalli, Devlapur, Thimmapur, Manglapur and Uppanayakanahalli series are relatively extensive.
- b) Moderate erosion on moderately deep to deep soils on above 3% slope are having 3472 hectares
- c) Severe erosion on above 3% slope on moderately deep to deep soils are 107 hectares.
- d) Area having moderate erosion on slopes above 3% on very deep soils is 731 hectares.
- e) Area having very deep soil and above 3% slope affected by severe erosion is 152 hectares (0.7%)
- f) Area under very deep soils having slight to moderate condition of salinity problem is 2587 hectares.
- g) Area under shallow soils is 1612 hectares.