

Report on detailed soil survey Tb4k, Tb4m, Tb4q, Tb5b, Tb5c and Tb6b subwatersheds, Tungabhadra catchment, Yelburga taluk, Raichur and Ron taluk, Dharwad district, Karnataka.

### 1. ABSTRACT

1. Surveyed area : Tb4k, Tb4m, Tb4q, Tb5b, Tb5c and Tb6b subwatersheds of Tungabhadra catchment, Yelburga taluka, Raichur and Ron taluk, Dharwad district, Karnataka.
2. Total area mapped and report: 22426 hectares.
3. Period of survey : February to June 1988
4. Type of survey : Detailed soil survey
5. Soil series mapped and area (in hectares)

Sl. No.	Soil series name	Subwatersheds						Total	Percentage
		Tb4k	Tb4m	Tb4q	Tb5b	Tb5c	Tb6b		
1.	Basapur	198	-	-	-	-	417	615	2.7
2.	Belvatagi	-	-	-	-	-	213	213	1.0
3.	Devalapur	797	1300	1791	1455	362	1777	7482	33.4
4.	Dyampur	163	-	28	20	18	-	229	1.0
5.	Gadgeri	43	-	-	-	-	-	43	0.2
6.	Gugrihalla	-	-	11	49	82	-	142	0.6
7.	Hulligudda	121	-	-	-	-	-	121	0.5
8.	Kallur	-	247	80	72	180	-	579	2.6
9.	Kudugunti	274	158	362	-	-	-	794	3.6
10.	Lakshmapur	-	-	-	-	47	-	47	0.2
11.	Manglapur	959	517	143	93	9	933	2654	11.8
12.	Sompur	-	-	3	17	17	-	37	0.2
13.	Thimmapur	473	903	1323	340	2228	702	5969	26.6
14.	Uppanayakanahalli	-	-	100	150	-	-	250	1.1
15.	Wadagenahalli	71	354	282	488	199	153	1547	6.9
16.	Miscellaneous	459	320	334	186	218	187	1704	7.6
Total		3558	3799	4457	2870	3360	4382	22426	100.0

### 6. Area under different land capability classes

Sl. No.	Land capability class	Area in ha.	Percentage	Soil series
1.	II	14,909	66.4	Basapur, Belvatagi, Devalapur, Dyampur, Gadgeri, Hulligudda, Kallur, Kudugunti, Lakshmapur, Mangalapur, Thimmapur, Uppanayakanahalli
2.	III	4,992	22.3	Belvatagi, Devalapur, Dyampur, Gugrihalla, Kallur, Mangalapur, Thimmapur, Uppanayakanahalli, Wadagenahalli.
3.	IV	821	3.7	Kallur, Sompur, Thimmapur, Wadagenahalli.
	Misc.	1,704	7.6	

7. Soil erosion.

<u>Erosion classes</u>	<u>Area (in ha.)</u>	<u>Percentage</u>
Slight erosion	7588	33.8
Moderate erosion	12366	55.2
Severe erosion	768	3.4
Miscellaneous	1704	7.6
<b>Total</b>	<b>22426</b>	<b>100.0</b>

8. Specific problematic area

Sl. No.	Nature of problem	<u>Subwatershed code</u>						Total
		Tb4k	Tb4m	Tb4q	Tb5b	Tb5c	Tb6b	
1.	Moderate erosion on moderately deep to very deep soils	1980	2011	939	777	644	1804	8155
2.	Severe erosion	133	123	101	88	219	104	768
3.	Gullied land	308	-	-	-	-	86	394
4.	Shallow rooting depth	-	-	3	17	17	-	37
5.	Gravelliness	310*	233*	-	-	-	57*	600*
<b>Total</b>		<b>2575</b>	<b>2134</b>	<b>1043</b>	<b>882</b>	<b>880</b>	<b>1895</b>	<b>9409</b>
<b>Percentage</b>		<b>27.4</b>	<b>22.7</b>	<b>11.1</b>	<b>9.4</b>	<b>9.3</b>	<b>20.1</b>	<b>100.0</b>

Note: The total problematic area is 9954 hectares out of which 545 hectares is having more than one problem which has been accounted only once in the actual total problematic area (9409 ha) \* indicates having more than one problem either partly or wholly.

9. Salient features.

- 1) 13,134 hectares of land is prone for moderate to severe erosion which constitutes 58.6% of the total area mapped.
- 2) 9409 hectares of land is the actual problematic area as listed in sl.No.8 under specific problematic areas.