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Report on detailed soil survey and land use of Tb8a,  
Tb8b, Tb8c and Tb8d subwatersheds, Tungabhadra catchment,  
Koppal taluk, Raichur district, Karnataka.

1. ABSTRACT

1. Surveyed area : Tb8a, Tb8b, Tb8c and Tb8d subwatersheds of Tungabhadra catchment, Koppal taluk, Raichur district, Karnataka.
2. Kind of survey : Detailed soil survey
3. Total area mapped and reported : 10,243 hectares
4. Period of work : 10th February 1988 to 9th July 1988
5. Soil series mapped and their distribution

Sl. No.	Soil series name	Tb8a	Tb8b	Tb8c	Tb8d	Total area in hectare	Per-centage
1.	Devalapur	12	-	305	401	718	7.0
2.	Dyampur	26	11	145	44	226	2.2
3.	Lakshmapur	1059	1063	304	107	2533	24.7
4.	Mainahalli	108	5	153	1	267	2.6
5.	Mangalapur	-	-	179	166	345	3.4
6.	Sompur	56	5	85	-	146	1.4
7.	Thimmapur	859	1004	173	213	2249	22.0
8.	Varadapur	8	-	683	698	1360	13.4
9.	Wadagenahalli	61	-	750	1291	2102	20.5
10.	Miscellaneous	98	43	70	77	288	2.8
Total		2287	2131	2827	2998	10243	100.0

6. Area under different land capability classes

Sl. No.	Land capability class	Area	Percentage	Soil series
1.	II	4537	44.3	Devalapur, Dyampur, Lakshmapur, Mangalapur, Thimmapur
2.	III	2264	22.1	Dyampur, Mainahalli, Thimmapur, Wadagenahalli
3.	IV	2899	28.3	Dyampur, Lakshmapur, Mainahalli, Sompur, Thimmapur, Varadapur
4.	VI	255	2.5	Sompur, Varadapur
Miscellaneous		388	2.8	
		10243	100.0	

## 7. Salient features

1. Nine soil series have been identified and mapped in the surveyed area. But the area of only four series namely Lakshmapur, Thinnapur, Varadapur and Nudaganhalli series are relatively extensive.
2. An area of 417 hectares (4.2%) having a slope gradient of more than 2% suffer from moderate erosion.
3. An area of 1866 hectares (18.2%) having slope gradient of more than 1% suffer from severe erosion.

## 8. Specific problematic areas (in hectares)

	<u>Th1a</u>	<u>Th1b</u>	<u>Th2a</u>	<u>Th2b</u>	<u>Total</u>
1. Moderate erosion on slopes above 2% on moderately deep to deep soils	44	-	308	279	631
2. Severe erosion	518	1018	278	88	1866
3. Shallow rooting depth	44	5	248	608	1313
<b>Total</b>	<b>592</b>	<b>1023</b>	<b>1017</b>	<b>384</b>	<b>3387</b>