

REPORT ON DETAILED SOIL SURVEY AND LANDUSE OF
 Ag2r, Ag4x and Ag4y SUBWATERSHEDS OF
 NAGARJUNASAGAR CATCHMENT
 DEODURG, MANVI, LINGSUGUR AND RAICHUR TALUKS,
 RAICHUR DISTRICT, KARNATAKA

810

 A B S T R A C T

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| 01. Survey area | Nagarjunasagar Catchment,
Deodurg, Manvi, Lingsugur and
Raichur taluks,
Raichur district,
Karnataka |
| 02. Type of survey | Detailed soil survey |
| 03. Type of base map | Cadastral Map (1:8,000 scale) |
| 04. No. of villages covered | 39 |
| 05. Total area surveyed | 15,980 ha |

Sr. No.	Subwater-shed code	Net area	Misc. area	Total area
01.	Ag2r	2,689	253	2,942
02.	Ag4x	7,961	604	8,565
03.	Ag4y	4,091	382	4,473
		14,741	1,239	15,980

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| 06. Period of survey | December, 1999 to June, 2000 |
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07. Soil series identified and their subwatershedwise extent

Sr.	Soil Series	Area under different subwatersheds (%)			Total (%)
		Ag2r	Ag4x	Ag4y	
01.	Chennampalli	-	610 (7.12)	-	610 (3.8)
02.	Devsugur	10 (0.34)	1528 (17.84)	284 (6.34)	1822 (11.4)
03.	Devargudda	146 (4.96)	272 (3.17)	526 (11.75)	944 (5.9)
04.	Gabbur	764 (25.97)	156 (1.82)	837 (18.71)	1757 (11.0)
05.	Holiguda	1331 (45.24)	76 (0.88)	799 (17.86)	2206 (13.8)
06.	Hosur	-	3117 (36.39)	44 (0.98)	3161 (19.8)
07.	Mallapur	-	158 (1.84)	37 (0.82)	195 (1.2)
08.	Pollepalli	210 (7.14)	142 (1.65)	333 (7.44)	685 (4.3)
09.	Tatikol	-	1332 (15.55)	810 (18.11)	2142 (13.4)
10.	Timmapur	228 (7.75)	286 (3.34)	417 (9.32)	931 (5.8)
11.	Uti	-	284 (3.31)	4 (0.08)	288 (1.8)
Total		2689 (91.40)	7961 (92.95)	4091 (91.46)	14741 (92.2)
Misc. area		253 (8.60)	604 (7.05)	382 (8.54)	1239 (7.8)
Grand total		2942 (100)	8565 (100)	4473 (100)	15980 (100)

08. Potential for agricultural development and land capability classification

Description	Land capability class	Area (ha) and %	Land capability unit	Area (ha)	Soil series
Good cultivated land	II	600 (3.7)	IIes1	600	Pollepalli
Moderately good cultivated land	III	2155 (13.5)	IIIes1	1626	Devargudda Mallapur Timmapur
			IIIes2	444	Devargudda Mallapur Timmapur
			IIIes3	85	Pollepalli
Fairly good lands suitable for limited cultivation	IV	11622 (72.7)	IVes1	5188	Chennampalli Devsugur Hosur Tatikol
			IVes2	2471	Chennampalli Devsugur Hosur Tatikol
			IVes3	3154	Gabbur
			IVes4	809	Holigudda
Well suited for grazing and afforestation	VI	364 (2.3)	VIes1	76	Tatikol
			VIes2	288	Uti
	Total	14741 (92.2)		14741	
	Misc. Area	1239 (7.8)			
	Grand Total	15980 (100)			

09. Salient Features

- * 4648 ha (31.6%) area is under deep to very deep soils.
- * Gabbur and Holiguda series have high exchangeable sodium percentage (12.9 to 38.4). Although very deep, cracking, clayey soils but due to high sodium, they have been placed under land capability unit IVes4 (marginal lands)
- * 13596 ha (92.2%) area suffers from moderate erosion and 1145 ha (7.8%) suffers from severe erosion.
- * 13,550 ha (92.%) area is under very gentle to gentle (1-5%) slope.
- * 8023 ha (54.4%) area has shallow soils.