

# Report on Detailed Soil Survey and Land Use of Ag3d and Ag3f subwatersheds of Nagarjunasagar Catchment, Shahpur Taluk, Gulbarga District, Karnataka

## ABSTRACT

01. Survey area : Ag3d and Ag3f subwatersheds of  
Nagarjunasagar catchment, Shahpur taluk,  
Gulbarga district, Karnataka
02. Type of survey : Detailed soil survey
03. Type of base map : Cadastral map (1:7,920 scale)
04. No. of villages covered : 15
05. Total area surveyed (ha) : 11,987 ha

(Area in ha)

No.	Subwatershed code	Net area	Misc. area	Total area	Percentage
01	Ag3d	5537	612	6149	51.3
02	Ag3f	5440	398	5838	48.7
		10977	1010	11987	100.0

06. Period of survey : December 2003 to April, 2004
07. Agro-climatic Zone : Southern plateau and hill region

## 08. Soil series identified and their subwatershedwise distribution (ha)

	Soil series	Ag3d	Ag3f	Total
01	Channur	156 (2.5)	-	156 (1.3)
02	Gabbur	370 (6.0)	101 (1.7)	471 (4.0)
03	Holiguda	1411 (23.0)	1932 (33.1)	3343 (28.)
04	Kondapur	220 (3.6)	588 (10.1)	808 (6.8)
05	Kurvihal	925 (15.0)	195 (3.3)	1120 (9.4)
06	Tumkur	1907 (31.0)	984 (16.9)	2891 (23.6)
07	Venkatapur	364 (5.9)	803 (13.8)	1167 (9.8)
08	Wadagera	184 (3.0)	837 (14.3)	1021 (8.6)
	Total	5537 (90.0)	5440 (93.2)	10977 (91.5)
	Misc.	612 (10.0)	398 (6.8)	1010 (8.5)
	Grand Total	6149 (100.)	5838 (100.0)	11987 (100.0)

## 09. Potential for agricultural development and land capability classification

Description	Land capability class	Area (ha)	Percentage	Land capability unit	Area (ha)	Soil series
Good cultivated land	II	1777	14.8	II-1	786	Wadagera
				IIe-1	235	Wadagera
				IIs-1	177	Kurvihal
				IIes-1	579	Kurvihal
Moderately good cultivated lands	III	4296	35.8	IIIs-1	481	Tumkur
				IIIs-2	22	Gabbur
				IIIes-1	2272	Channur, Tumkur
				IIIes-2	1054	Kondapur, Tumkur
				IIIes-3	18	Kurvihal
IIIes-4	449	Gabbur				
Fairly good lands suitable for limited cultivation	IV	4856	40.5	IVs-1	691	Holiguda
				IVes-1	346	Kurvihal
				IVes-2	2769	Holiguda, Venkatapur
				IVes-3	980	Holiguda, Venkatapur
IVes-4	70	Holiguda				
Fairly suited for grazing or afforestation	VII	48	0.4	VIIes-1	48	Kondapur
Total		10977	91.6		10977	
Misc		1010	8.4		1010	
<b>Total</b>		<b>11987</b>	<b>100.0</b>		<b>11987</b>	

### 10. Salient Features

# 7122 ha (59.4%) area is under deep to very deep soils

# Gabbur, Holiguda and Venkatapur series have high exchangeable sodium percentage. Although very deep, cracking, clayey soils but due to high sodium, they have been placed under land capability class III and marginal lands. Use of gypsum will be beneficial for their reclamation.

# 7173 ha (67.3%) area suffers from moderate erosion and 480 ha (4%) suffers from severe erosion.

# 7253 ha (60.9%) area is under very gentle slope and 3724 ha (30.6%) area is under gentle slope.