

# Report on Detailed Soil Survey and Land Use of Ag3g and Ag3j subwatersheds of Nagarjunasagar Catchment, Shahpur Taluk, Gulbarga District, Karnataka

## ABSTRACT

01. Survey area : Ag3g and Ag3j 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 : 19
05. Total area surveyed (ha) : 7,355 ha

(Area in ha)

No.	Subwatershed code	Net area	Misc. area	Total area
01	Ag3g	3178	234	3412
02	Ag3j	3808	135	3943
		6986	369	7355

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

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

	Soil series	Ag3g	Ag3j	Total	Peren-tage
01	Etigi	16	139	155	2.1
02	Gonpad	23	100	123	1.6
03	Holiguda	2304	2536	4840	65.8
04	Kurvihal	660	69	729	10.0
05	Tumkur	161	542	703	9.6
06	Venkatapur	14	138	152	2.0
07	Wadagera	-	284	284	3.9
	Total	3178	3808	6986	95.0
	Misc.	234	135	369	5.0
	Grand Total	3412	3943	7355	100.0
	Percentage	46.4	53.6	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	710	9.7	IIE-1	269	Wadagera
				IIEs-1	269	Gonpad, Kurvihhal
				IIs-1	172	Gonpad, Kurvihhal
Moderately good cultivated lands	III	1129	15.3	IIIe-1	15	Wadagera
				IIIes-1	411	Gonpad, Kurvihhal
				IIIes-2	640	Tumkur
				IIIes-3	63	Tumkur
Very well suited for grazing. Not arable	V	5147	70.0	Vs-1	440	Holiguda
				Vs-2	3	Holiguda
				Ves-1	2973	Etigi, Holiguda, Venkatapur
				Ves-2	1687	Holiguda, Venkatapur
				Ves-3	44	Venkatapur
Total		6986	95.0		6986	
Misc		369	5.0		7355	
<b>Total</b>		<b>7355</b>	<b>100.0</b>		<b>7355</b>	

### 10. Salient Features

# Deep to very deep soils constitute 86% of the total area surveyed (7308 ha)

# Moderately deep soils cover 9.6% (703 ha) of the surveyed area

# Area covered by very gently to gently sloping lands is 86.2% (6301 ha) of the total area surveyed

# 6257 ha (85.6%) area suffers from moderate erosion hazard.

# Good cultivated lands (land capability class II) cover 710 ha (9.7%) of the total area surveyed.

# Moderately good cultivated lands (land capability class III) cover 1129 ha (15.3%) of the total area.

# Sodic soils (Etigi, Holiguda and Venkatapur soil series) cover 5147 ha (70%) area and need soil reclamation through use of gypsum.