

Report on Detailed Soil Survey and Land Use of Ae13k, Ae13p and Ae13r subwatersheds of Nagarjunasagar Catchment, Adoni, Alur and Holagunda taluk of Kurnool district, Andhra Pradesh and Shiriguppa taluk of Bellary district, Karnataka State

ABSTRACT

01. Survey area : Ae13k, Ae13p and Ae13r subwatersheds of Nagarjunasagar catchment, Adoni, Alur and Holagunda taluk of Kurnool district, Andhra Pradesh and Shiriguppa taluk of Bellary districts of Karnataka state
02. Type of survey : Detailed soil survey
03. Type of base map : Cadastral map (1:7,920 scale)
04. No. of villages covered : 28
05. Total area surveyed (ha) : 15,874 ha

(Area in ha)

Sr. No.	Subwater shed code	New Micro watershed code	Net area	Misc. area	Total area
01	Ae13k	4D3A8c3, c4, c5	5837	87	5924
02	Ae13p	4D3A8h1, h2, h3	5404	315	5719
03	Ae13r	4D3A8m1, m2, m3	4031	200	4231
	Total		15272	602	15874

06. Agro climatic Zone : Southern hill and plateau regions (X)
07. Period of survey : June 2010 to August 2010
08. Soil series identified and their subwatershed wise distribution (ha)

Soil series	Ae13k	Ae13p	Ae13r	Total	Percentage
Adoni	168	152	-	320	2.02
Alabanuru	67	373	38	478	3.01
Hebbatam	4832	1529	1682	8043	50.67

Maddi Lingadahalli	-	130	31	161	1.01
Nagahalli	232	544	286	1062	6.69
Peddagonahalu	393	68	-	461	2.90
Santekulluru	145	2608	1994	4747	29.90
Misc.	-	-	-	602	3.80
Grand total	5837	5404	4031	15874	100.0

09 Potential for agricultural development and land capability classification

Soil series covered	Land capability unit	Area (ha)	Land capability class	Area (ha)	Percentage
Hebbatam Nagahalli Peddagonahalu Santekulluru	IIs-1 IIes-1	3105 9729	II	12834	80.85
Alabanuru Hebbatam Nagahalli Peddagonahalu Santekulluru	IIIs-1 IIIes-1 IIIes-2	439 1089 429	III	1957	12.33
Maddi Lingadahalli	IVes-1	161	IV	161	1.01
Adoni	VIIes-1	234	VII	234	1.47
	P/M*	86	P/M	86	0.54
Total		15272		15272	96.20
Misc.		602		602	3.80
Grand Total		15874		15874	100.0

*P/M Area is falls under rainfed forest, needs pasture and forest management.

10. Salient Features

Deep to very deep soils constitute 91.18% of the total surveyed area (14,474 ha).

Moderately deep soils cover 478 ha (3.01%) of the surveyed area

Shallow soils cover 320 ha (2.02%) of the surveyed area

Very gently to gently sloping land constitutes 11,408 ha (71.87%) which is suitable for agriculture.

About 2840 ha (1.79%) area are modified by terracing upto 0.5% slope

An area of 10,818 ha (68.15%) suffers from moderate erosion hazards.

Sodic soils (Maddi Lingadahalli) cover 161 ha (1.01%) area and need soil reclamation through the use of gypsum/pyrites with organic matter.