

**Report on Detailed Soil Survey and Land Use of  
Markapur Mandal, Prakasham District,  
Andhra Pradesh**

**ABSTRACT**

01. Survey area : Markapur Mandal,  
Prakasham District, A.P.
02. Type of survey : Detailed soil survey
03. Type of base map : Cadastral map (1:7,920 and 1:3960 scale)
04. R.S. Data : IRS-PAN+P6 LISS-III merged data ID
05. Published Map : Cadastral map 1:12,500 scale
06. Total area surveyed (ha) : 29,050 ha
07. NO. of villages : 23
08. Period of survey : May – July, 2007
09. Agro-climatic Zone : XI (East Coast plain and Hill region)

## i) Soil Series identified and mapped in Markapur Mandal

No	Soil series	Total	Percentage
01	Akkacheruvu (AK)	1019	3.5
02	Bhupathipalli (BP)	1420	4.9
03	Bodapadu (B)	409	1.4
04	Chintakunta (C)	358	1.3
05	Gottipadia (G)	203	0.7
06	Jammanapalli (J)	3364	11.6
07	Kolabhimunipadu (K)	1875	6.4
08	Kothapalli (KP)	826	2.9
09	Markapur	954	3.3
10	Nikarampalli (N)	416	1.4
11	Peddanagulavaram (P)	46	0.1
12	Peddayachavaram (PY)	4392	15.1
13	Rayavaram (R)	3449	11.9
14	Srinivasapur (SP)	590	2.0
15	Sunkesula (S)	3117	10.7
16	Vemulakota (VK)	1305	4.5
17	Vemulapeta (VP)	843	2.9
	<b>Total</b>	<b>24586</b>	<b>84.6</b>
	<b>Misc.</b>	<b>4464</b>	<b>15.4</b>
	<b>Grand Total</b>	<b>29050</b>	<b>100.0</b>

## Suggestive Landuse based on Land Capability classification

Landuse	Land capability class	Area (ha)	Percentage	Land Capability unit	Area (ha) Percentage	Soil series
Good cultivable land	II	10520	36.2	IIs-1	1225 (4.2)	Bodapadu, Markapur, Srinivasapur, Sunkesula, Vemulakota, Vemulapeta
				IIs-2	901 (3.1)	Bhupathipalli, Bodapadu, Markapur, Srinivasapur, Vemulapeta
				IIs-3	204 (0.7)	Srinivasapur
				IIs-4	499 (1.7)	Bhupathipalli, Chintakunta, Jammanapalli, Kothapalli
				IIs-5	261 (0.9)	Jammanapalli
				IIs-1	3766 (13.0)	Markapur, Srinivasapur, Sunkesula, Vemulakota, Vemulapeta
Moderately good cultivated lands	III	2427	8.3	IIIes-1	292 (1.0) 338 (1.1)	Kolabhimunipadu, Markapur, Srinivasapur, Sunkesula, Vemulakota, Vemulapeta
				IIIes-2	411 (1.4)	Bhupathipalli, Jammanapalli, Kothapalli, Nikarampalli, Kolabhimunipadu

				IIIes-3	1264 (4.4)	Peddanagulavaram Kolabhimunipadu
				IIIes-4	122 (0.4)	Kolabhimunipadu
Fairly good land marginal land suitable for limited cultivation	IV	10562	36.4	IVs-1	94 (0.3)	Rayavaram
				IVes-1	972 (3.4)	Bodapadu Markapur Sunkesula Vemulakota Vemulapeta
				IVes-2	1361 (4.7)	Bhupathipalli Jammanapalli Kothapalli Nikarampalli
				IVes-3	243 (0.9)	Kolabhimunipadu Peddanagulavaram
				IVes-4	4385 (15.1)	Gottipadia Peddayachavaram Rayavaram
				IVes-5	2046 (7.0)	Peddayachavaram Rayavaram
				IVes-6	1461 (5.0)	Peddayacharam
Fairly suitable for pasture/ grazing	VI	58	0.2	VIes-1	58 (0.2)	Gottipadia
Fairly suitable for pasture and afforestation	VII	1019	3.5	VIIes-1	1019 (3.5)	Akkacheruvu
Total		24586	84.6			
Misc.		4464	15.4			
Grand Total		29050	100			

### SALIENT FEATURES

# Deep to very deep soils constitute 46.8% (13602 ha) of the total surveyed area

# Moderately deep soils cover 6.6% (1921 ha)

# Shallow soil covers 31.2% (9063 ha) of the surveyed area