

Report on detailed soil survey and landuse of
Ac2g, Ac2h, Ac2j and Ac2m subwatersheds of
Nagarjunasagar catchment, Taluk Achampet, district Mahbubnagar,
and taluk Devarkonda, district Nalgonda, Andhra Pradesh

A B S T R A C T

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| 1. Survey area | Ac2g, Ac2h, Ac2j and Ac2m subwatersheds
Nagarjunasagar catchment
Taluk Devarkonda, district Nalgonda
Taluk Achampet, district Mahbubnagar
Andhra Pradesh |
| 2. Type of survey | Detailed soil survey |
| 3. Total geographical area reported and mapped | : 16,869 ha |
| 4. Period of survey | : May 1991 to June 1991 and December 1991 to May, 1992 |
| 5. Soil series and their extent | |

Soil series and symbol	Subwatershedwise area and their extent				Total
	Ac2g	Ac2h	Ac2j	Ac2m	
Achampet (AP)	-	68(1.7)	-	-	68(0.4)
Bamanpalli (BR)	-	-	-	355(6.9)	355(2.2)
Bodupalli (BD)	-	-	-	71(1.4)	71(0.4)
Chennampalli (C)	1337(44.6)	-	-	1199(2.32)	2536(15.4)
Denda (D)	-	-	-	1039(20.1)	1039(6.3)
Devarkonda (DK)	211(7.0)	-	-	822(15.4)	1033(6.4)
Kambalapalli (KB)	1225(40.8)	-	122(2.9)	711(13.7)	2058(12.5)
Karnakunta (KK)	-	1020(25.0)	854(20.2)	-	1874(11.4)
Kulunigutta (KG)	-	1855(45.5)	1674(39.8)	667(12.9)	4196(25.5)
Mannaṅṅur (MN)	-	654(16.0)	1282(30.4)	159(3.0)	2095(12.7)
Masaram (MS)	-	84(2.0)	-	-	84(0.5)
Padra (PD)	-	398(9.8)	280(6.7)	-	678(4.1)
Patancheru (PT)	31(1.1)	-	-	151(2.9)	182(1.1)
Tatikol (T)	51(1.7)	-	-	-	51(0.3)
Venkeshwaram (V)	145(4.8)	-	-	-	145(0.8)
Total	3000	4079	4214	5174	16855
Misc..	181	64	3	156	404
Grand total	3181	4143	4215	5330	16869

6. Landuse and soil suitability

Description	Land cap. class	Area (ha)	Land cap. unit	Area (ha)	Soil series covered
Good cultivated land	II	1472 (8.9)	IIe1	790	Achampet, Masram, Denda
			IIIs1	24	Bamanpalli
			IIIs2	403	Bamanpalli, Patancheru
			IIIs3	79	Patancheru
			IIes1	145	Venkeshwaram
			IIes2	31	Patancheru
Moderately good cultivated land	III	5098 (30.9)	IIIe1	40	Masaram
			IIIs1	52	Devarkonda
			IIIs2	130	Devarkonda
			IIIs3	182	Devarkonda
			IIIes1	3161	Devarkonda, Kulumigutta, 1
			IIIes2	1533	Devarkonda, Kulumigutta
Fairly good	IV	4019 (24.4)	IVs1	80	Denda
			IVes1	171	Kulumigutta
			IVes2	818	Bodupalli, Kambalapalli, Denda
			IVes3	2298	Mannanur, Denda, Kambalapalli
			IVes4	652	Tatikol, Mannanur
Well suited for grazing for pasture forestry	VI	1466 (8.9)	VIes1	1466	Kambalapalli, Mannanur
Suitable for forestry	VII	4410 (26.9)	VIIes1	4410	Chennampalli, Karnakunta
		<u>16465</u>			

Salient features and specific problems

- * Fifteen soil series have been identified and mapped with an area of 16869 ha.
- * About 59.1% area is under shallow soils. These soils are suitable for pasture development, afforestation or other nonagricultural activities.
- * About 31.7% is under moderately deep soil. These soils are suitable for rainfed cultivation.
- * About 9.2% area is under deep to very deep soils and is suitable for multicrop utilisation with improved agricultural practices.
- * About 59.2% area occurs on very gentle to gentle (1-5%) slopes and requires soil water conservation.
- * Nearly 30.6% area suffers from severe erosion hazards. The appropriate soil and water conservation measures need to be taken on priority.