

Report on Detailed Soil Survey and Land use of Aj5j, Aj5p, Aj9f, Aj9l, Aj9q, Aj9t, Aj9w, Aj9z and Aj10b subwatersheds of 'Aj' subcatchment, Nagarjunsagar catchment, (RVP) in Dharwad and Gadag districts, Karnataka State.

ABSTRACT

1. Surveyed area : Aj5j, Aj5p, Aj9f, Aj9l, Aj9q, Aj9t, Aj9w, Aj9z and Aj10b subwatersheds of 'Aj' subcatchment, Nagarjunsagar catchment, (RVP) in Dharwad and Gadag districts, Karnataka State.
2. Total area mapped and reported: : 35986 hectares
3. Kind of survey: : Detailed soil survey
4. Period of survey : May and June 2001 / Dec. 2001 – June 2002
5. Base map used : Cadastral maps 1:7920 mile
6. Soil series mapped and area in hectares under each soil series

S. No.	Name of the soil series	District		Aj5j	Aj5p	Aj9f	Aj9l	Aj9q	Aj9t	Aj9w	Aj9z	Aj10b	Total area (ha)
		Dharwad	Gadag										
1	Devlapur 'D'	-	596	206	-	-	-	101	-	289	-	-	596
2	Dyampur 'Dy'	1598	1345	296	284	1231	153	255	54	337	173	160	2943
3	Kallur 'K'	1308	201	77	-	254	425	9	110	116	-	518	1509
4	Lakshmapur 'L'	261	-	-	-	-	261	-	-	-	-	-	261
5	Mainahalli 'M3'	217	114	61	-	-	70	37	-	16	-	147	331
6	Mangalapur 'M5'	-	265	-	-	-	-	4	-	261	-	-	265
7	Thimmapur 'T'	13344	14876	2238	1919	2242	4139	3751	2795	4187	3692	3257	28220
8	Wadagenahalli 'W'	-	620	264	-	-	-	1	-	355	-	-	620
	Sub-total	16728	18017	3142	2203	3727	5048	4158	2959	5561	3865	4082	34745
	Misc.	560	681	165	38	179	165	210	128	250	29	77	1241
	Grand Total	17288	18698	3307	2241	3906	5213	4368	3087	5811	3894	4159	35986

7. Area under different land capability classes

Sl. No.	Land capability class	District wise area (ha)		Total area (ha)	Percentage	Soil series
		Dharwad	Gadag			
1	II	10789	9762	20551	57.1	Devlapur, Dyampur, Kallur, Lakshmapur, Mangalapur, Thimmapur
2	III	1278	4064	5342	14.8	Devlapur, Dyampur, Kallur, Mainahalli, Thimmapur, Wadagenahalli
3	IV	4661	4191	8852	24.6	Dyampur, Kallur, Thimmapur, Mainahalli
4	Forest	-	-	-	-	-
	Miscellaneous	560	681	1241	3.4	-
	Grand total	17288	18698	35986	100.0	-
	Percentage	48.0	52.0	100.0		

8. Specific problematic area

Sl. No.	Type of Problem	Aj5j	Aj5p	Aj9f	Aj9l	Aj9q	Aj9t	Aj9w	Aj9z	Aj10b	Total area (ha)
1	Moderate erosion on slope above 3% on very deep soils	254	191	150	356	1254	310	1822	111	239	4687
2	Moderate erosion on slope above 3% on deep soils	82	-	69	15	150	-	197	-	-	513
3	Moderate erosion on slope above 3% in moderately deep soils	238	-	-	-	18	-	355	-	-	611
4	Severely eroded soils	1147	876	1132	1137	448	746	876	1040	897	8299
5	Severe stoniness and rockiness	-	-	-	-	24	-	128	-	-	152
6	Actual problematic area	1721	1067	1351	1508	1894	1056	3378	1151	1136	14262
7	Percentage	4.79	2.97	3.76	3.97	5.20	2.94	9.01	3.20	3.16	39.0

9. Salient features:

1. Out of total area of 35986 ha, about 34745 ha was arable and remaining 124 ha was under misc. category.
 2. In the surveyed area 8 soil series were established with major area of 28220 ha under Thimmapur series.
 3. About 20551 ha(57.1%) of the area is under class II of the LCC, whereas 5342 ha(14.8%) and 8852 ha(24.6%) were under Class III and Class IV, respectively.
 4. Nearly 4687 ha of the area is infested with moderate erosion on slope more than 3 % on very deep soils, whereas 513 ha was under deep soils with moderate erosion on slope above 3rd.
 5. Moderate erosion on slope above 3% in moderately deep soils was found only 611 ha.
 6. In total about 8299ha severely eroded soils were observed in survey area.
- Actual problematic area was found to be 14262 ha.