

REPORT ON DETAILED SOIL SURVEY AND LAND USE OF Ah7d5a, Ah7f3c AND Ah7f4d SUBWATERSHEDS OF BHIMA SUB CATCHMENT, NAGARJUNSAGAR CATCHMENT IN SINDGI TALUK OF BIJAPUR DISTRICT AND SHORAPUR AND JEVARGI TALUKS OF GULBARGA DISTRICT AND SINDGI TALUK OF BIJAPUR DISTRICT, KARNATAKA.

ABSTRACT

1. Survey Area : Ah7d5a, Ah7f3c and Ah7f4d subwatersheds of Nagarjunsagar Catchment in Bijapur and Gulbarga districts, Karnataka state.
2. Total area mapped & reported : 11159 hectares.
3. Kind of survey : Detailed soil survey
4. Period of Survey : Dec-1998 to May-1999
5. Base maps : Cadastral maps of 8" = 1 mile scale.
6. Soil series mapped and subwatershedwise area under each series.

Sl. No.	Name of Soil series	Total area in Hectares	Ah7f5a	Ah7f3c	Ah7f4d
1	Alahal (AL)	40	40	-	-
		(0.4)	(0.8)	-	-
2	Ainapur (AP)	281	98	148	35
		(2.5)	(1.9)	(5.0)	(1.2)
3	Bekinal (BK)	1296	509	457	330
		(11.6)	(9.8)	(15.4)	(10.9)
4	Budihal (BD)	74	74	-	-
		(0.7)	(1.4)	-	-
5	Devangaon (DG)	323	196	91	36
		(2.9)	(3.8)	(3.1)	(1.2)
6	Gadgi (G)	2034	180	1084	770
		(18.2)	(3.5)	(36.5)	(25.5)
7	Hansihal (HN)	898	898	-	-
		(8.0)	(17.3)	-	-
8	Kadargi (KD)	764	764	-	-
		(6.8)	(14.8)	-	-
9	Kalakeri (KL)	119	119	-	-
		(1.1)	(2.3)	-	-
10	Mopti (MP)	444	444	-	-
		(4.0)	(8.6)	-	-
11	Sompur (S)	98	98	-	-
		(0.9)	(1.9)	-	-
12	Turakanagori (TK)	2990	220	1083	1687
		(26.8)	(4.2)	(36.5)	(56.0)
13	Wadagenahalli (W)	90	90	-	-
		(0.8)	(1.7)	-	-
14	Yalagi (YL)	1348	1348	-	-
		(12.1)	(26.0)	-	-
		10799	5078	2863	2858
	Miscellaneous	360	101	103	156
		(3.2)	(2.0)	(3.5)	(5.2)
	Grand total	11159	5179	2966	3014

7. Area under different land capability classes

S. No.	Land capability class	Total area (in hectare)	Percentage	Soil series
1	II	1395	12.5	Ainapur, Devanagaon, Mopti, Yalagi
2	III	3275	29.3	Alahal, Ainapur, Budihal, Devanagaon, Gadgi, Hanshihal, Mopti, Yalagi, Waggenhalli
3	IV	2512	22.5	Bekinal, Budihal, Devanagaon, Gadgi, Hanshihal, Kalakeri, Mopti, Turakanagori Wadagenahalli, Yalagi
4	VI	3617	32.4	Kadargi, Turakanagori, Sompur
5	Miscellaneous	360	3.2	
	Total	11159	100%	

Miscellaneous lands included in the area are under village sites, streams or river, road, tank, stony waste etc.

8. Salient feature and specific problem area:

- The depth wise distribution of soils is as follows: very deep soils 3086 (27.7%) (Bekinal, Devangaon, Kalakeri, Yalagi series) deep soils 765 ha. (6.9%) (Alahal, Ainapur, Mopti series) moderately deep soils 3096 ha. (27.7%) (Budihal, Gadgi, Hanshihal, Wadagenahalli series) and very shallow to shallow soils 3852 ha. (34.5%) (Kadargi, Sompur, Turakanagori series).
- Severely eroded area is 4460 ha. (40%) and moderately eroded area is 6339 ha(56.8%).
- Out of 11,159 ha land , only 12 ha(0.1%) of Turakanagori series is having a slope of 5-10%, 4364 ha land is having a slope of 1-3% and 6423 ha land is having a slope of 3-5%.
- In the surveyed area Turakanagori series has maximum area of 2990 ha. followed by Gadgi (2034 ha.), Yalagi (1348 ha.), Bekinal (1296 ha.), Hanshihal (898 ha.), Kadargi (764 ha.), Mopti (444 ha.), Devanagaon (323 ha.), Ainapur (281 ha.), Kalakeri (119 ha.), Sompur (98 ha.), Wadagenahalli (90 ha.), Budihal (74 ha.) and least in Alahal series (40 ha.).
- Nearly 3617 ha. area of the surveyed area is suggested to be used for non agricultural purpose. The area generally belongs to Turakanagori, Sompur and Kadargi series.
- All the series mapped in the area are of black colour except Wadagenahalli.