

REPORT ON DETAILED SOIL SURVEY AND LAND USE OF Ah5n1, Ah5n2, Ah5n3, Ah5n5a, Ah5n7, Ah5n8, Ah5n9, Ah5n9a SUBWATERSHEDS OF BHIMA SUBCATCHMENT, PART OF NAGARJUNASAGAR CATCHMENT IN AFZALPUR AND GULBARGA TALUKS, GULBARGA DISTRICT, KARNATAKA.

ABSTRACT

- 1)(a) Survey area : Ah5n1, Ah5n2, Ah5n3, Ah5n5a, Ah5n7, Ah5n8, Ah5n9 & Ah5n9a subwatersheds of Bhima subcatchment, a part of Nagarjunasagar catchment in Afzalpur and Gulbarga taluks, Gulbarga district, Karnataka.
- (b) Agro-climatic zone : Southern variable rainfall mixed soil zone (No.13).
- 2) Total area mapped & reported : 17,566 Hectares.
- 3) Period of survey : 25.11.1992 to 10.04.1993.
- 4) Type of survey : Detailed Soil Survey.
- 5) Soil series mapped and their extent under each sub-watershed:

Sl. No.	Name of the soil series	Subwatersheds							Area (ha.)	Percentage (%)	
		Ah5n1	Ah5n2	Ah5n3	Ah5n5a	Ah5n7	Ah5n8	Ah5n9			Ah5n9a
1.	Basantpur	-	208	264	-	-	5	135	66	678	3.9
2.	Bhima	81	59	22	182	241	926	732	-	2243	12.8
3.	Borale	199	356	567	-	139	-	35	623	1919	10.9
4.	Chimkod	235	373	316	39	137	30	46	62	1238	7.0
5.	Gadgi	217	522	554	414	479	245	-	532	2963	16.9
6.	Hadanur	-	-	-	-	-	-	333	31	364	2.1
7.	Kandgola	173	379	527	340	281	99	140	118	2057	11.7
8.	Kumbhare	338	522	175	187	312	314	119	619	2586	14.7
9.	Mainal	-	-	-	16	70	-	-	56	142	0.8
10.	Malla	-	-	-	-	-	-	36	30	66	0.4
11.	Talsangi	33	257	208	176	77	134	-	71	956	5.4
12.	Wadagaon	-	288	421	236	169	318	18	12	1462	8.3
Sub Total		1276	2964	3054	1590	1905	2071	1594	2220	16674	94.9
Miscellaneous		131	81	70	89	95	241	162	23	892	5.1%
Grand Total		1407	3045	3124	1679	2000	2312	1756	2243	17566	100.0%

6. Distribution of area under different land capability classes:

Sl. No.	Land capability class	Area(ha)	%	Soil series
1.	II	4315	24.6	Basantpur, Bhima, Borale, Chimkod, Kumbhare and Malla
2.	III	7338	41.7	Basantpur, Bhima, Borale, Chimkod, Kumbhare, Gadgi, Hadanur, Kandgola, Mainal, Malla
3.	IV	4462	25.4	Basantpur, Bhima, Borale, Chimkod, Gadgi, Hadanur, Kandgola, Kumbhare, Mainal, Talsangi, Wadagaon
4.	VI	559	3.2	Talsangi, Wadagaon
Total		16674	94.9	
Misc. lands		892	5.1	
Grand Total		17566	100.0	

**Salient features:**

- About 8872 hectares constituting 50.5% of the total area is under deep to very deep black soils and has very good potential for agriculture practices.
- Around 92.3% of the total area is under moderate to severe erosion which needs immediate soil conservation measures.
- Area covered under shallow soils and moderately deep soils is 2418 hectares (13.5%) and 5384 hectares (30.8%) respectively.
- Majority of the area (58.4%) is under gentle slope (3-5%) category while 36.5% of the total area is under very gentle slope (1-3%).