

REPORT ON DETAILED SOIL SURVEY AND LAND USE OF Nj1g, Nj3g, Nj3f and NI3a SUBWATERSHEDS OF NIZAMSAGAR CATCHMENT IN BHALKI AND BIDAR TALUKS, BIDAR DISTRICT, KARNATAKA STATE.

ABSTRACT

- 1. Surveyed area** Nj1g, Nj3g, Nj3f and NI3a subwatersheds of Nizamsagar Catchment, Bhalki and Bidar taluks, Bidar district, Karnataka State
- 2. Total area mapped and reported** : 11,857 ha.
- 3. Kind of survey** : Detailed soil survey
- 4. Period of survey** : December 2003 to May 2004
- 5. No. of surveyed villages** : 23 villages
- 6. Base map used** : Cadastral maps scale 1:7920 (8"=1 mile)
- 7. Agro-climatic zone** : 'X' The southern plateau and hill region

8. Soil series with respective extent vis a vis and Subwatershed (in ha)

Sl. No.	Name of Soil series	Total Area (ha)	Subwatershed wise distribution of area (ha)				
			Percentage	Nj1g	Nj3g	Nj3f	NI3a
1	Basantpur	1039	8.8	364	195	447	33
2	Chimkod	990	8.4	102	252	354	282
3	Chaundi	331	2.8	331	-	-	-
4	Kasarsirsi	171	1.4	161	10	-	-
5	Kandgola	4016	33.9	600	1110	765	1541
6	Mamadapur	763	6.4	466	120	103	74
7	Sultanpur	1072	9.0	26	355	458	233
8	Wadagaon	2801	23.6	730	556	988	527
	Sub Total	11183	94.3	2780	2598	3115	2690
	Misc.	674	5.7	244	177	152	101
	Grand total	11857	-	3024	2775	3267	2791
	Percentage			25.5	23.4	27.6	23.5

9. Area under different land capability classes (in ha):

Sl. No.	Land Capability Class	Total Area (ha)	Percentage	Soil Series
1	II	1182	10.0	Basantpur, Chimkod, Sultanpur
2	III	1022	8.6	Kandgola
3	IV	8601	72.5	Basantpur, Chimkod, Kasarsirsi, Kandgola, Mamdapur, Sultanpur, Wadagaon
4	VI	74	0.6	Chaundi, Kasarsirsi
5.	VII	304	2.6	Chaundi
5	Misc.	674*	5.7	
	Grand total	11857	100	

*Miscellaneous lands include area of village site, stream/river and tanks.

10. Salient features and specific problems of the area:

- a) Eight soil series are established and mapped in the surveyed area. Out of these Kandgola and Wadagaon series are relatively extensive covering an area of 4016 ha (33.9%) and 2801 ha (23.6%), respectively. Whereas, Kasarsirsi covers only 171ha(1.4%) the least area amongst the series mapped
- b) Maximum area under severe erosion 4224 ha is under 3-5% slope followed by 3606ha under 1-3% slope, 763ha under 5-10% slope and 304ha under 15-25% slope. This data suggests lack of conservation work, its urgent need and continued detroration of the top soil in the slope range of 1-5%.
- c) The area under severe and moderate erosion is 8930 ha and 2259 ha respectively. Out of total area mapped under slope categories 3-5%, 5-10% and 15-25% is 100% under severe erosion whereas, under 1-3% slope 62% of the area is under severe erosion.
- d) The distribution of the soils w.r.t. soil depth is very deep soils (Basantpur and Sultanpur) 2111 ha (17.8%); deep soils (Chimkod) 990 ha (8.4%); moderately deep soils (Kasarsirsi, Kandgola) 4187 ha (35.3%), shallow soils (Chaundi, Mamdapur, Wadagaon) 3895 ha (32.8%) and misc. lands 674 ha (5.7%),