

REPORT ON DETAILED SOIL SURVEY AND LAND USE OF Nj3d, Nj3e, Nk3a, Nk3b, Nk3c, Nk3d, Nk3e, Nk3f, Nk3g AND Nk3h SUBWATERSHEDS OF NIZAMSAGAR CATCHMENT, AURAD AND BHALKI TALUKS, BIDAR DISTRICT, KARNATAKA STATE.

i. ABSTRACT

1. Surveyed area : Nj3d, Nj3e, Nk3a, Nk3b, Nk3c, Nk3d, Nk3e, Nk3f, Nk3g and Nk3h subwatersheds of Nizamsagar catchment, Aurad and Bhalki taluks, Bidar district, Karnataka state.
2. Total area surveyed & reported : 27,340 hectares
3. Kind of survey : Detailed soil survey
4. Period of survey : November 1992 to June 1993 and December 1993 to February 1994.
5. No. of Surveyed villages: 44 (Forty four)
6. Base map used : Cadastral maps 8"=1 mile
7. Agro-climatic zone : Semi arid tropical (No.10)
8. Soil series mapped and subwatershedwise area under each series:

Sl. No.	Soil Series	Subwatershedwise area(in hect.)										Total area (Hectares)	
		Nj3d	Nj3e	Nk3a	Nk3b	Nk3c	Nk3d	Nk3e	Nk3f	Nk3g	Nk3h		
1.	Chinkod	56	56	53	15	186	238	50	385	86	96	1221	4
2.	Kandgola	1021	1041	87	113	596	1375	540	1853	453	907	7986	29
3.	Ladha	176	173	32	46	69	28	58	13	32	-	627	2
4.	Shorhalli	225	183	424	1219	2037	1139	1649	1094	693	468	9131	33
5.	Sultanpur	226	396	109	129	144	8	249	182	269	302	2014	7
6.	Wadagaon	731	1145	52	97	379	1229	217	676	232	400	5158	18
	Misc.	139	197	59	64	107	79	112	189	157	100	1203	4
	Total	2574	3191	816	1683	3518	4096	2875	4392	1922	2273	27340	
	Percentage	9.4	11.7	3.0	6.1	12.9	15.0	10.5	16.1	7.0	8.3		100

9. Area under different land capability classes:

Sl. No.	Land Capability class	Area (Hectares)	Percentage	Soil series
1.	II	10855	39.8	Chimkod, Shorhalli and Sultanpur
2.	III	8391	30.7	Chimkod, Kandgola, Shorhalli and Sultanpur
3.	IV	6223	22.7	Kandgola, Shorhalli, Sultanpur and Wadagaon
4.	VI	616	2.2	Ladha, Wadagaon
5.	VII	52	0.2	Ladha
	Misc.	1203	4.4	
Total		27340	100.0	

Miscellaneous lands include area under Villagesite, Road, Stream, River, Tank and Railway track.

10. Specific problematic areas:

Sl. No.	Specific problems	Nj3d	Nj3e	Nk3a	Nk3b	Nk3c	Nk3d	Nk3e	Nk3f	Nk3g	Nk3h	Total
1.	Moderate erosion on slope above 3% on moderately deep to very deep soils.	93	319	37	5	-	384	51	630	50	288	1857*
2.	Stoniness	1229	1269	75	122	346	1153	218	388	166	257	5223*
3.	Shallowness	907	1318	84	143	448	1257	275	689	264	400	5785*
4.	Severe erosion	93	205	109	124	131	-	135	-	257	243	1297
5.	Gullied land	-	5	-	-	-	-	-	-	-	-	5
Actual problematic area		1340	1830	230	272	579	1641	461	1319	545	931	9148*

* Note: Total problematic area is 14167 hectares. But 5019 hectares is having more than one problem. Hence it has been accounted only once in the actual problematic area which is 9148 hectares.

11. Salient features:

- In all, six soil series have been established. Kandgola, Shorhalli and Wadagaon series are quite extensive with an area of more than 5000 hectares individually.
- 19,246 hectares (70.5%) of the total area falls under land capability class II and III.
- An area of 9148 hectares (33.5%) is the actual problematic area, out of which 1297 hectares is prone for severe erosion and 5 hectares are gullied lands.