

REPORT ON DETAILED SOIL SURVEY AND LAND USE OF Nm1a, Nm1b Nm1c and Nj2c SUBWATERSHEDS OF NIZAMSAGAR CATCHMENT RVP IN BASAVAKALYAN, BHALKI- AND BIDAR TALUKS BIDAR DISTRICT, KARNATAKA

ABSTRACT

1. Surveyed area : Nm1a, Nm1b Nm1c and Nj2c subwatersheds of Nizamsagar catchment RVP in Basavakalyan, Bhalki and Bidar taluks, Bidar district, Karnataka
2. Total area mapped and reported : 11436 hectares
3. Kind of survey : Detailed soil survey
4. Period of survey : May and June 2001 and Dec. 2001 – Feb. 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	Nm1a	Nm1b	Nm1c	Nj2c	Total area ha.	%
1	Basantpur	379	78	320	369	1146	10.0
2	Chimkod	611	419	172	443	1645	14.4
3	Gumtapur				94	129	1.1
4	Jeergihal	40	-	-	-	40	0.4
5	Kandgola	1231	1069	813	1118	4231	37.0
6	Kasarsirsi	36	88	23	11	158	1.4
7	Mirkal	-	-	53	111	148	1.3
8	Sultanpur	165	114	23	122	424	3.7
9	Wadagaon	556	678	578	1185	2997	26.2
	Subtotal	3018	2446	1966	3453	10883	95.2
	Misc.	116	105	94	238	553	4.8
	Grand Total	3134	2551	2060	3691	11436	100

8. Area under different land capability classes:

S. No.	Land capability class	Area in ha.	%	Soil series
1	II	2272	19.9	Basantpur, Chimkod, Sultanpur
2	III	2609	22.8	Basantpur, Chimkod, Kandgola, Kasarsirsi, Sultanpur
3	IV	5908	51.7	Basantpur, Jeergihal, Kandgola, Chimkod, Kandgola, Kasarsirsi, Mirkal, Sultanpur, Wadagaon
4	VI	55	0.5	Gumtapur,
5	VII	39	0.3	Gumtapur
6	Misc. (Road. Village-site, stream, ROC)	553	4.8	
	Grand Total	11436	100	

9. Specific Problematic area:

S. No.		Subwatersheds				Grand Total	Percent
		Nm1a	Nm1b	Nm1c	Nj2c		
1	Moderate erosion (d5)	3	-	49	83	135	0.01
2	Moderate erosion (d4)	-	-	12	257	269	0.02
3	Moderate erosion (d3)	-	-	249	581	830	7.26
4	Severe erosion	2130	1694	133	137	4094	35.80
5	Shallow rooting depth	556	678	615	1390	3239	28.30
	Stoniness/Rockiness	-	-	9	177	186	16.30
	Actual Problematic area	2133	1729	989	2386	7273	63.30
	Percent	18.65	15.12	8.65	20.9		

10. Salient features:

- Total area (11436 ha) of 4 subwatersheds is spread over 26 villages in Basavakalyan, Bhalki and Bidar taluk of Bidar district, Karnataka State
- Out of 11436 ha total area, 10883 ha (95.2%) belong to nine established series while the remaining 553 ha (4.8%) is under miscellaneous categories
- Extensive area of 7022 ha (61.4 %) belong to three major series of Basantpur (very deep), Chimkod (deep) and Kandgola (moderately deep)
- Out of total surveyed area, about 4094 ha (35.88%) is prone to severe erosion while 3239 ha (28.3%) is having shallow to very shallow soils. However the actual problematic area in 7273ha (63.3%) after consideration of severity of problems.
- Major portion of the surveyed area is under class IV (51.7 %) followed by class III (22.8%) and class II (19.9%)