

REPORT ON DETAILED SOIL SURVEY AND LAND USE OF Ha2c, Ha6v, Ha7v and Ha7w SUB WATERSHEDS OF HIRAKUND (R.V.P.) CATCHMENT, DISTRICT- RAIGARH (CHHATTISGARH), SAMBALPUR AND SUNDARGARH (ORISSA).

ABSTRACT

1. Survey area : Priority sub watersheds Ha2c, Ha6v, Ha7v & Ha7w of Hirakud (RVP) Catchment, Distt. Raigarh (Chhattisgarh), Sambalpur & Sundargarh (Orissa).
2. Type of Survey : Detailed Soil Survey.
3. Total area surveyed and mapped: : 13594 ha.
4. Agro-Climatic Zone : 7
5. Period of Survey : December, 1998 to January, 1999 and November, 2000 to April, 2001.
6. Base Map : Cadastral Map (16"=1 mile scale)

7. Soil Series Mapped and Their Distribution

Sl. No.	Name of Soil Series	No. of Mapping Units	Sub watersheds wise area (in ha.)				Total Area (ha.)	%
			Ha2c	Ha6v	Ha7v	Ha7w		
1.	Amra (AR)	3	786 (5.8)	-	-	-	786	5.8
2.	Amwatikar (AT)	3	-	2040 (15.0)	420 (3.1)	3062 (22.5)	5222	40.6
3.	Bathantoli (BT)	2	290 (2.1)	-	-	-	290	2.1
4.	Chirkunda (CK)	3	-	177 (1.3)	184 (1.4)	70 (0.5)	431	3.2
5.	Dumka (D)	3	778 (5.7)	-	-	-	778	5.7
6.	Jugrat (JT)	5	-	105 (0.8)	161 (1.2)	155 (1.1)	421	3.1
7.	Kanika (KK)	3	-	369 (2.7)	23 (0.2)	90 (0.7)	482	3.6
8.	Kinamar (KM)	3	-	18 (0.1)	1380 (10.1)	1002 (7.4)	2400	17.6
9.	Majhauri (MJ)	3	344 (2.5)	-	-	-	344	2.5
10.	Nagar (N)	2	145 (1.1)	-	-	-	145	1.1

11.	Victoria (VT)	3	-	1030 (7.6)	96 (0.7)	153 (1.1)	1279	9.4
	Total	32	2343 (17.2)	3739 (27.5)	2264 (16.7)	4532 (33.3)	12878	94.7
12.	Sub merged area		490 (3.6)	-	-	-	-	-
13.	Miscellaneous area (Road, Habitation, River etc.)		42 (0.3)	88 (0.7)	48 (0.3)	48 (0.4)	716	5.3
Grand Total			2875 (21.1)	3827 (28.2)	2312 (17.0)	4580 (37.7)	13594	100.0

8. Sub Watershed wise Distribution of Area (in ha.) under Different Land Capability Classes

Sl.No.	Land capability class	No. of sub watersheds(area in ha.)				Total area (ha.)	%
		Ha2c	Ha6v	Ha7v	Ha7w		
1.	II-1	264	125	133	133	655	4.8
2.	IIw-1	145	177	184	70	576	4.2
3.	IIIe-1	37	332	93	168	630	4.6
4.	IIIes-1	8	2	9	42	61	0.5
5.	IVe-1	43	678	31	7	759	5.6
6.	Ives-1	282	146	14	44	486	3.6
7.	Ives-2	-	221	-	4	225	1.7
8.	Vies-1	130	-	224	150	504	3.7
9.	Vies-2	648	18	1156	852	2674	19.7
10.	Vies-3	7	47	122	224	400	2.9
11.	VIIes-1	779	1993	298	2838	5908	43.4
Total		2343 (17.2)	3739 (27.5)	2264 (16.7)	4532 (33.3)	12878	94.7
12.	Misc.	42 (0.3)	88 (0.7)	48 (0.3)	48 (0.4)	226	1.7
13.	Sub-merged	490 (3.6)	-	-	-	490	3.63
Grand Total		2875 (21.1)	3827 (28.2)	2312 (17.0)	4580 (33.7)	13594	100.0

9. Salient Features and Specific Problems of the Area

Sl.No.	Problems	Area in Ha.	Percentage
1.	Total area	13594	100.0
2.	Miscellaneous area (Habitation, Road, Tank, River etc.)	226	1.7
3.	Area under forest	7824	57.5
4.	Area under khesra forest	2416	17.8
5.	Area under cultivation	2638	19.4
6.	Good cultivable land	1231	9.0
7.	Moderately good cultivable land	683	5.0
8.	Fairly good cultivable land	1470	10.8
9.	Shallow soils	9486	69.7
10.	Deep soils	772	5.7
11.	Very deep soils	2620	19.3
12.	Terraced & bunded land	1231	9.0
13.	Area having high water table	576	4.2
14.	Area free from stone & rocks	3499	25.7
15.	Stony and rocky area	674	5.0
16.	Severely stony & severely rocky Land	8705	64.0
17.	Moderately eroded land	683	5.0
18.	Severely eroded land	10964	80.7