

**REPORT ON DETAILED SOIL SURVEY AND LAND USE OF Ha7g, Ha7h, Ha7q AND Ha7r SUB-WATERSHEDS OF HIRAKUD (R.V.P.) CATCHMENT, DISTRICT JHARSUGUDA AND SUNDARGARH, ORISSA.**

**ABSTRACT**

1. Survey Area : Priority sub-watersheds Ha7g, Ha7h, Ha7q and Ha7r of Hiraakud R.V.P. Catchment, Orissa
2. Type of Survey : Detailed Soil Survey
3. Total Surveyed area : 10641 ha.
4. Period of survey : January 2001 to March 2001 and November 2001 to May 2002

**5. Soil Series and their Sub-watershed wise Distribution of Area**

Sl. No	Soil Series	No. of Mapping Unit	Sub-watershed wise Area in ha (%)				Total (%)
			Ha7g	Ha7h	Ha7g	Ha7r	
1.	Amgaon (AG)	2	-	102 (1.0)	-	-	102 (1.0)
2.	Amwatikar (AT)	2	-	-	369 (3.5)	1304 (12.2)	1673 (15.7)
3.	Bargoria (BA)	9	560 (5.3)	212 (2.0)	-	-	772 (7.3)
4.	Bendukani (B)	4	394 (3.7)	477 (4.5)	-	-	871 (8.2)
5.	Chirkunda (CK)	2	-	-	181 (1.7)	210 (2.0)	391 (3.7)
6.	Edla (ED)	4	21 (0.2)	171 (1.6)	-	-	192 (1.8)
7.	Jugrat (JT)	7	-	-	1296 (12.2)	580 (5.4)	1876 (17.6)
8.	Karchatoli (KT)	4	111 (1.1)	-	-	-	111 (1.1)
9.	Kinamar (KT)	6	-	-	660 (6.2)	1725 (16.2)	2385 (22.4)
10.	Parkala (PK)	4	142 (1.3)	252 (2.3)	-	-	394 (3.6)
11.	Sarabmunda (SM)	3	-	1041 (9.8)	-	-	1041 (9.8)
12.	Selodeeih (SD)	4	-	-	141 (1.3)	4 (0.1)	145 (1.4)
13.	Victoria (VT)	3	-	-	213 (2.0)	13 (0.1)	226 (2.1)
Total			1228 (11.6)	2255 (21.2)	2860 (26.9)	3836 (36.0)	10179 (95.7)
Miscellaneous			78 (0.7)	38 (0.3)	243 (2.3)	103 (1.0)	462 (4.3)
G. Total			1306 (12.3)	2293 (21.5)	3103 (29.2)	3939 (37.0)	10641 (100%)

### 6. Sub-watershed wise Distribution of Area under Different Land Capability Classes

Sl. No.	Land Capability Classes	Sub-watershed s Area (ha)				Total Area (ha )
		Ha7g	Ha7h	Ha7g	Ha7r	
1.	II	626 (5.9)	428 (4.0)	1351 (12.7)	404 (3.8)	2809 (26.4)
2.	III	168 (1.6)	306 (2.9)	480 (4.5)	403 (3.8)	1357 (12.8)
3.	IV	68 (0.6)	39 (0.4)	264 (2.5)	123 (1.1)	494 (4.6)
4.	VI	366 (3.5)	1226 (11.5)	420 (4.0)	1888 (17.7)	3900 (36.7)
5.	VII	-	256 (2.4)	345 (3.2)	1018 (9.6)	1619 (15.2)
Total		1228 (11.6)	2255 (21.2)	2860 (26.9)	3836 (36.0)	10179 (95.7)
Miscellaneous		78	38	243	103	462 (4.3)
G. Total		1306 12.3	2293 (21.5)	3103 (29.2)	3939 (37.0)	10641 100%

### 7. Specific Problems of Survey Area and their Extent

Sl. No.	Problems	Sub-watershed wise Area (ha.)				Total Area in ha (%)
		HaYg	HaYh	HaYg	HaYr	
1.	Shallow soils	394 (3.7)	1518 (14.3)	1029 (9.7)	3029 (28.4)	5970 (56.1)
2.	Unfavourable Texture	106 (1.0)	35 (0.3)	-	-	141 (1.3)
3.	Moderate slope	-	196 (1.8)	232 (2.2)	953 (9.0)	1381 (13.0)
4.	Strong slope	-	785 (7.4)	24 (0.2)	310 (2.9)	1119 (10.5)
5.	Very steep slope	-	256 (2.4)	345 (3.2)	1363 (12.8)	1964 (18.4)
6.	Moderate erosion	275 (2.6)	472 (4.4)	871 (8.2)	526 (4.9)	2144 (20.1)
7.	Severe erosion	406 (3.8)	1485 (14.0)	650 (6.1)	2906 (27.3)	5447 (51.2)
8.	Severely stoniness and rockiness	366 (3.4)	1482 (13.9)	765 (7.2)	2906 (27.3)	5519 (51.8)

Figures in parenthesis indicate per cent of total area