

**Report on Detailed Soil Survey and Land Use of 4G2D4a1, 4G2D2n1,  
4G2D2q1, 4G2D2r1, 4G2D2t1, 4G2D2u1, 4G2D2v1 & 4G2D2w1  
Subwatersheds, Hasdo Subcatchment,  
Hirakud Catchment , Tahsil- Katghora and Pali  
District: Korba, Chhatisgarh State.**

**ABSTRACT**

1. Survey area : 4G2D4a1, 4G2D2n1, 4G2D2q1, 4G2D2r1, 4G2D2t1, 4G2D2u1, 4G2D2v1 & 4G2D2w1 Subwatersheds, Tah.: Katghora, District: Korba (Chhattisgarh).
2. a. Total area reported & mapped : 33,126 ha.
- b. Type of survey : Detailed Soil Survey
- c. Period of survey : December, 2001 to March, 2002  
April 2002 to June, 2002.
- d. Base map : Aerial photographs
- e. Scale of base maps : 1: 20,000 approx.
3. Soil series mapped and area covered by each (ha):

Sl.No.	Soil Series & Symbol	Total area (ha)	Percentage (%)
1.	Amakhokra (A)	1085	3.3
2.	Bartarai (B)	14237	43.0
3.	Bichhipara (BC)	392	1.2
4.	Dhawaitikra (DT)	1849	5.6
5.	Katghora (K)	948	2.9
6.	Lapha (L)	6560	19.8
7.	Nawapara (N)	2100	6.3
8.	Patrapali (P)	1587	4.8
9.	Podi (PD)	239	0.7
10.	Tanakhar (TN)	185	0.5
11.	Tuman (T)	3145	9.5
	<b>Total</b>	<b>32,327</b>	<b>97.6</b>
12.	Other features like village situation, river, road, tank etc.	799	2.4
	<b>Grand Total</b>	<b>33,126</b>	<b>100.0</b>

#### 4. Land Capability classes:

Capability class	Total area (ha.)	Percentage	Soil Series
II	5919	17.9	Amakhokra, Dhawaitikra
III	1562	4.7	Nawapara , Patrapali, Tuman, Amakhokra, Katghora, Lapha, Tanakhar, Tuman.
IV	3280	9.9	Amakhokra, Bichhipara, Katghora, Lapha, Tanakhar, Tuman.
VI	1076	3.3	Bartari, Bichhipara, Podi, Tanakhar
VII	1896	5.7	Bartarai
<b>Total</b>	<b>13733</b>	<b>41.5</b>	
Area under forest (R.F.)	18594	56.1	
Other features including Habitation , River,Nala,Tank,Road etc.	799	2.4	
<b>Grand Total</b>	<b>33,126</b>	<b>100.0</b>	

#### 5. Specific Problems. :

S. No	Erosion Class	Total problematic area		Associated series
		Total area (ha.)	Percentage (%)	
1.	None to slight erosion	5536	16.7	Dhawaitikra,Nawapara, Patrapali.
2.	Moderate erosion	3975	12.0	Amakhokra,Bichhipara, Katghora, Lapha, Tanakhar,Tuman.
3.	Severe erosion	22527	68.0	Amakhokra,Bartarai, Bichhipara, Katghora,Lapha,Tanakhar,Tuman.
4.	Very severe erosion	289	0.9	Tuman,Podi,Tanakhar.
<b>Total</b>		<b>32,327</b>	<b>97.6</b>	

#### 6. Salient features:

1. The survey area of 3,975 ha. (12.0%) has moderate erosion, 22,527 ha. (68.0%) has severe erosion and 289 ha. (0.9 %) has very severe erosion respectively. These areas require prime attention for the soil conservation in the watersheds.
2. Survey area bears 14,237 ha. (43.0%) of land under moderately deep soils and 17,698 ha (54.4%) deep to very deep soils respectively.
3. An area of 9,974 ha. (30.1%) has gentle slopes (3.5%).