

**Report on Detailed Soil Survey and Land Use of 4G2D3n-1 and 4G2D3n-2
Subwatersheds of Hasdo Subcatchment (Mahanadi Catchment),
Tahsil and District : Korba , Chhattisgarh State.**

ABSTRACT

- 1) Survey Area : 4G2D3n-1 and 4G2D3n-2 of Hasdo-Subcatchment
(Mahanadi Catchment)
- 2) Total area mapped & reported. : 10,275 ha
- 3) Geographical location : Between 22^o31' – 22^o41' N Latitude &
82^o46' -82^o54'E Longitude.
- 4) Type of Survey : Detailed Soil Survey
- 5) Period of Survey : May to June, 2007.
- 6) Agro-climatic zone : Eastern Plateau and Hill Region No. VII.
- 7) Soil Series mapped and their extent (ha) :

S. No.	Name of Series (Symbol)	No. of Mapping Units	Total Area in ha.(%)	4G2D3n-1	4G2D3n-2
1.	Bichhutola (BH)	3	652 (6.3)	585 (16.0)	67 (1.0)
2.	Bundeli (BL)	3	745 (7.3)	745 (20.4)	-
3.	Kantadwari (KD)	2	94 (0.9)	94 (2.6)	-
4.	Lemru (L)	2	242 (2.4)	242 (6.6)	-
5.	Malga (ML)	2	189 (1.8)	130 (3.6)	59 (0.9)
6.	Paradol (PR)	4	7824 (76.1)	1657 (45.4)	6167 (93.1)
7.	Phulwaritola (PT)	3	185 (1.8)	72 (2.0)	113 (1.7)
8.	Subtotal (Percentage)	19	9931 (96.6)	3525 (96.6)	6406 (96.7)
	Miscellaneous (River,Road etc.)	-	344 (3.4)	125 (3.4)	219 (3.3)
	Grand Total (%)	-	10275 (100.0)	3650 (100.0)	6625 (100.0)

8. Land Capability Classification of Different Soil Series :

S. No.	Land Capability Sub class	Area (ha)	Percentage	Soil Series
1.	II-1	283	2.7	Malga, Kantdwari
2.	IIs-1	195	1.9	Lemru
3.	Iie-1	121	1.2	Phulwaritola
4.	IIIe-1	64	0.6	Phulwaritola
5.	IIIes-1	47	0.5	Lemru
	Total	710	6.9	
	Reserved forest	9221	89.8	
	Miscellaneous	344	3.4	
	G.Total	10,275	100.00	

9. Subwatershed-wise distribution of area (ha) under different land capability classes.

Land Capability Sub-class	Subwatersheds		Total Area (%)	Soil Series
	4G2D3n-1	4G2D3n-2		
II-1	224 (2.2)	59 (0.5)	283 (2.7)	Kantadwari, Malga
IIs-1	195 (1.0)	-	195 (1.9)	Lemru
Iie-1	72 (0.7)	49 (0.5)	121 (1.2)	Phulwaritola
IIIe-1	-	64 (0.6)	64 (0.6)	Phulwaritola
IIIes-1	47 (0.5)	-	47 (0.5)	Lemru
Total	538 (5.2)	172 (1.7)	710 (6.9)	
R.Forest	2987 (29.1)	6234 (60.7)	9221 (89.8)	
Miscellaneous	125 (1.2)	219 (2.1)	344 (3.4)	
Grand Total	3650 (35.5)	6625 (64.5)	10275 (100.0%)	

10. Salient Features :

- Out of the total surveyed area of 10,275 ha , only 13.3% area has very deep soil and remaining area of 8569 ha (83.4%) is covered with shallow soils.
- Area of 9453 ha (92%) suffer from moderate erosion hazards , which needs immediate soil conservation measures.
- 9221 ha (89.7%) land comes under reserve forest, leaving only 6.9% of the who area i.e. 710 ha is used for cultivation.