Report on Detailed Soil Survey and Land Use of Nv1x, Nv5b, Nv5d, Nv5f, Nv5g, Nv5h, Nv5j, Nv5k & Nv5m Subwatersheds, Narmada Catchment, Tahsil-Niwas, District-Mandala, Madhya Pradesh

ABSTRACT

- **Surveyed Area** : Subwatersheds Nv1x, Nv5b, Nv5d, Nv5f, Nv5g, Nv5h, Nv5j, Nv5k, & Nv5m; Narmada Catchment, Tahsil-Niwas, District-Mandla, Madhya Pradesh
- **Total Area Reported and Mapped** : 18,062 ha
- **Type of Survey** : Detailed Soil Survey
- **Period of Survey** : December 98 to March 1999
- **Soil Series mapped and area covered by each**

Area in ha (%)

S. No.	Soil Series	Total Area	Subwatersheds								
			Nv1x	Nv5b	Nv5d	Nv5f	Nv5g	Nv5h	Nv5j	Nv5k	Nv5m
1.	Amla (A)	3,070 (17.0)	478 (19.4)	231 (11.8)	265 (9.6)	59 (6.9)	61 (6.7)	564 (23.4)	221 (9.2)	253 (12.4)	938 (41.5)
2.	Devlan (D)	323 (1.8)	287 (11.7)	-	13 (0.5)	-	-	23 (1.0)	-	-	-
3.	Jamli (JM)	678 (3.7)	18 (0.7)	-	175 (6.3)	104 (11.8)	162 (17.9)	143 (5.9)	62 (2.6)	5 (0.3)	9 (0.4)
4.	Khardi (KH)	9,011 (49.9)	1060 (43.2)	1243 (63.6)	1388 (50.2)	164 (18.6)	329 (36.3)	1,076 (44.6)	1,613 (67.6)	1,211 (59.5)	927 (41.0)
5.	Kalpi (KL)	299 (1.6)	146 (5.9)	-	27 (1.0)	-	-	54 (2.2)	-	11 (0.5)	61 (2.7)
6.	Mandla (M)	308 (1.7)	30 (1.2)	-	-	278 (31.5)	-	-	-	-	-
7.	Palkha (PL)	3,129 (17.3)	386 (15.7)	478 24.4	521 (18.9)	108 (12.2)	101 (11.2)	357 (14.8)	362 (15.2)	501 (24.6)	315 (13.9)
8.	Tikariya (TK)	828 (4.6)	-	-	331 (12.0)	55 (6.2)	215 (23.8)	146 (6.0)	47 (2.0)	28 (1.4)	6 (0.3)
Total		**17,646**	**2,405**	**1,952**	**2,720**	**768**	**868**	**2,363**	**2,305**	**2,009**	**2,256**
Others (Hab., River, Road, Tank, etc.)		416 (2.4)	54 (2.2)	3 (0.2)	42 ((1.5)	115 (13.0)	37 (4.1)	52 (2.1)	81 (3.4)	27 (1.3)	5 (0.2)
Grand Total		**18,062**	**2,459**	**1,955**	**2,762**	**883**	**905**	**2,415**	**2,386**	**2,036**	**2,261**

➢ Land Capability Classification

S. No.	Land Capability Subclass	Subwatersheds									Total Area	Soil Series
		Nv1x	Nv5b	Nv5d	Nv5f	Nv5g	Nv5h	Nv5j	Nv5k	Nv5m		
1.	IIs	11 (0.4)	- -	79 (2.9)	375 (42.5)	162 (17.9)	118 (4.9)	62 (2.6)	5 (0.3)	9 (0.4)	821 (4.6)	Jamli Mandla
2.	IIes	19 (0.8)	-	51 (1.8)	5 (0.6)	-	20 (0.8)	-	-	-	95 (0.5)	Jamli Kalpi Mandla
3.	IIIes	7 (0.3)	-	170 (6.2)	16 (1.8)	103 (11.4)	8 (0.3)	5 (0.2)	-	-	309 (1.7)	Jamli Kalpi Tikariya
4.	IVes	158 (6.4)	10 (0.5)	510 (18.5)	68 (7.7)	233 (25.7)	153 (6.3)	216 (9.1)	64 (3.1)	17 (0.7)	1429 (7.9)	Khardi Kalpi Tikariya
5.	VIes	538 (21.9)	224 (11.5)	655 (23.7)	103 (11.7)	266 (29.4)	432 (17.9)	985 (41.3)	613 (30.1)	83 (3.7)	3,899 (21.6)	Devlan Khardi Palkha
6.	VIIes	37 (1.5)	17 (0.9)	22 (0.8)	26 (2.9)	59 (6.5)	66 (2.7)	89 (3.7)	22 (1.1)	4 (0.2)	342 (1.9)	Amla
7.	Area under Res. Forest	1,635 (66.5)	1,701 (87.0)	1,233 (44.6)	175 (19.8)	45 (5.0)	1,566 (64.9)	948 (39.7)	1,305 (64.1)	2,143 (94.8)	1,0751 (59.5)	
8.	Misc. Land	54 (2.2)	3 (0.1)	42 (1.5)	115 (13.0)	37 (4.1)	52 (2.2)	81 (3.4)	27 (1.3)	5 (0.2)	416 (2.3)	
Grand Total		**2,459**	**1,955**	**2,762**	**883**	**905**	**2,415**	**2,386**	**2,036**	**2,261**	**18,062**	

➢ Salient Features

⇒ The shallow to very shallow soils cover 15,533 ha which is 86.0% of the total Survey area of 18,062 ha.

⇒ The deep to very deep soils cover 2,113 ha which is 11.7% of the total survey area of 18,062 ha suitable for agriculture.

⇒ An area of 2,967 ha (16.4%) suffers from moderate erosion hazard whereas

⇒ 13,835 ha (76.6%) is having the problem of severe erosion hazard

⇒ An area of 1,062 ha (5.9%) occurs on very gentle slope and 5,569 ha (30.8%) area is under gentle slope.