

REPORT ON DETAILED SOIL SURVEY AND LAND USE OF
Pa1f, Pa1g, Pa1h, Pa3b, Pa3c, Pa3d, Pc1b, Pc1c,
Pc1f, Pc1g, Pc1h, Pc1j AND Pc1k SUBWATERSHEDS
(20B & 23B SUB-CATCHMENT, D.V.C) PANCHET DAM
CATCHMENT, DIST. PURULIA, WEST BENGAL

A B S T R A C T

1. Survey area: Panchet Dam Catchment (DVC)
Sub-watersheds No. Pa1f, Pa1g,
Pa1h, Pa3b, Pa3c, Pa3d, Pc1b,
Pc1c, Pc1f, Pc1g, Pc1h, Pc1j
and Pc1k (DVC Code 20B & 23B),
Purulia district in West Bengal.
2. Location: $23^{\circ} 23'$ - $23^{\circ} 38'$ N latitude and
 $86^{\circ} 24'$ - $86^{\circ} 46'$ E longitude.
3. Agro-climatic Zones:
(As per planning Commission) Eastern Plateau and Hill
(Zone No. 7).
4. Total area surveyed: 37,820 ha.
5. No. of villages surveyed: Full - 146, Part - 117.
6. Period of survey: Dec.'91 to June'92.
7. Type of survey: Detailed Soil Survey.

8. Distribution of soil series and their extent in each sub-watershed:

Sl No.	Name of soil series & symbol	Subwatershed-wise distribution of area in ha.													Total area in ha.	%	No. of villages covered	No. of mapp-ing units
		Pa1f	Pa1g	Pa1h	Pa3b	Pa3c	Pa3d	Pc1b	Pc1c	Pc1f	Pc1g	Pc1h	Pc1j	Pc1k				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1.	Dumka(D)	490	518	1413	807	587	435	584	291	276	2260	635	670	1372	10338	27.3	198	7
2.	Lachimpur (L)	498	170	245	213	315	121	119	11	120	585	170	326	74	3027	8.0	162	5
3.	Jamkati(J)	96	45	35	219	72	-	30	204	116	-	19	6	10	825	2.2	45	6
4.	Jamuasol (JS)	972	498	1022	862	791	358	301	307	394	1143	384	655	660	8347	22.1	205	3
5.	Kanti(KT)	-	-	-	18	-	-	70	30	13	7	15	5	5	163	0.4	25	2
6.	Bathantoli (BT)	464	95	298	485	167	95	93	172	221	282	136	580	230	3319	8.8	140	6
7.	Pusaro(P)	11	-	-	-	-	-	4	44	53	-	-	46	60	218	0.6	13	3
8.	Radhadamodarpur (RD)	120	86	127	103	76	23	66	23	45	170	60	49	15	963	2.5	83	5
9.	Raghunathpur (R)	924	432	372	829	643	425	199	435	149	136	198	371	125	5236	13.8	144	3

(Contd.) 8. Distribution of soil series and their extent in each subwatershed:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
10. Misc.	842	460	453	862	483	232	204	233	151	439	258	478	262	5357	14.3	194	-	
Total:	4417	2304	3965	4458	3134	1690	1670	1750	1536	5022	1875	3186	2813	37820	100%			

10. Salient features and problem of the area:

- a) 18135 ha. (48.0%) area has deep to very deep soil and 3990 ha. (10.5%) area has moderately deep soil.
- b) Mainly the lands are very gentle to gentle slopes. 80.2% area of very gentle slope and 5.5% area gentle slope.
- c) Most of the land (22735 ha.) are fit for agriculture where 37.7% area is best land for cultivation. 9728 ha. land is unfit for agriculture but suitable for forest or pasturisation.
- d) For irrigation suitability 17566 ha. area is best where 14539 ha. land have immense limitation for sustained use under irrigation and 358 ha. land is not suitable for irrigation.
- e) 5297 ha. area is very good for paddy cropping, 17810 ha. land is good to fair for paddy cultivation and rest 10356 ha. land is not suitable for paddy.
- f) The area has the problem due to erosion, waterlogging and shallow depth, 10338 ha. (27.3%) area is covered with shallow soil, 3956 ha. (10.4%) area are susceptible to severe erosion and 8347 ha. (22.1%) land surface is prone to seasonal overflow.