

REPORT ON DETAILED SOIL AND LAND USE SURVEY
OF Rc2t, Rc5p AND Rc5q SUBWATERSHEDS OF
RUPNARAYAN F.P.R. CATCHMENT, P.S. SALBANI
AND BINPUR, DISTRICT MIDNAPORE, WEST BENGAL

A B S T R A C T

1. Name of surveyed sub-watersheds: Rc2t, Rc5p and Rc5q of Rumarayan F.P.R. Catchment, P.S. Salbani and Binpur, District Midnapore, West Bengal.
2. Total area reported: 10,685 ha.
- 3.a) Type of survey: Detailed soil survey of medium intensity.
- b) Period of survey: January to April, 1988.
- c) Agro-climatic Region: Eastern plateau & hills.
Inbetween $22^{\circ}34'$ - $22^{\circ}41'$ N latitude and $87^{\circ}47' 5''$ - $87^{\circ}14' 3''$ E longitude.
4. Series-wise distribution of area under different subwatersheds and their percentage.

(Contd.) No. 4.

Sl. No.	Name of soil series	No. of manning units	Subwatersheds and its area in ha.			Total area ha. & per cent
			Rc2t (%)	Rc5p (%)	Rc5q (%)	
1	2	3	4	5	6	7
1.	Argora (AG)	5	1235 (24.0)	88 (2.8)	146 (6.2)	1469 (13.7)
2.	Bistunur (BP)	4	570 (10.8)	240 (7.7)	210 (9.9)	1020 (9.6)
3.	Ghoradanga (GD)	2	28 (0.5)	139 (4.5)	201 (8.6)	368 (3.5)
4.	Illambazar (IB)	3	1877 (35.8)	953 (30.8)	280 (11.8)	3110 (29.0)
5.	Jamwasol (JS)	3	529 (10.2)	231 (7.5)	301 (12.8)	1061 (10.0)
6.	Kochdih (KD)	4	439 (8.5)	657 (21.2)	363 (15.3)	1459 (13.8)
7.	Madnahari (MH)	3	363 (6.7)	157 (5.0)	-	520 (4.8)
8.	Mrigendahi (MD)	3	60 (1.1)	264 (8.5)	74 (3.1)	398 (3.7)
9.	Mehagram (MG)	3	-	48 (1.5)	453 (19.1)	501 (4.7)
10.	Radhadamo- darpur (RD)	4	71 (1.4)	236 (7.6)	288 (12.2)	595 (5.5)
11.	Others (Misc.)		47 (1.0)	90 (2.9)	47 (2.0)	184 (1.7)
Total:			5219	3103	2363	10685
%			100	100	100	100

3. Area in ha. under different land capability classes (Subwatershed-wise);

Sl.No.	Land capability classes	Name of subwatersheds in ha.			Total area %	
		Rc2t (%)	Rc5p (%)	Rc5q (%)	in ha.	
1.	II	2880 (54.9)	2463 (79.5)	1738 (73.5)	7081	66.4
2.	III	989 (18.8)	260 (8.3)	259 (11.0)	1385	12.9
3.	IV	810 (15.9)	168 (5.4)	147 (6.2)	1248	11.6
4.	VI	487 (9.3)	108 (3.4)	172 (7.3)	767	7.2
5.	VII	6 (0.1)	14 (0.5)	-	20	0.2
6.	Misc.lands	47 (1.0)	90 (2.9)	47 (2.0)	184	1.7
Total:		5219	3103	2363	10,685	
%		(100.0%)	(100.0%)	(100.0%)	(100.0%)	

6. Specific problems: (Area in ha. under different erosion class/
water logging/draughtness etc.

Erosion of the area	Area in ha.	Percentage (%)
(a) Area affected by moderate erosion.	4664	43.5
(b) Area affected by severe erosion.	1663	15.5
(c) Area affected by very severe erosion.	265	2.5
(d) Area affected by seasonal water logging and over flowing.	1429	13.5
(e) Area affected by draught for paddy cultivation.	2480	23.3
(f) Area other (Misc.)	184	1.7
Total:		10,685
		100%

7. Salient features & specific problems:

- i. The total area of 10,685 ha., only 4,900 ha. (36.8%) is suitable for arable lands i.e these lands are used for agricultural (paddy i.e kharif paddy, boro paddy and other rabi crops) proper management may be made to drain out excess water at rainy season. Proper arrangement for irrigation should be made at the time of boro paddy, rabi crops etc. cultivation.
- ii. Nearly 4664 ha. (43.5%) of the total surveyed area is under moderate erosion and 1469 ha. (13.7%) is under shallow soils and needs special soil as well as water conservation measures.
- iii. About 1928 ha. (18.0%) is under severe to very severe erosion hazards. Immediate proper soil and water conservation measure should be taken up in these lands.
- iv. Rest of the area 184 ha. (1.7%) requires immediate vegetative cover, implementation of engineering methods as well as proper management of these lands and arrangement should be made to check the bank cutting erosion.