

REPORT ON PRIORITY DELINEATION OF SUBWATERSHEDS IN SUBARNAREKHA
F.P.R CATCHMENT

ABSTRACT

- 1 Survey area :- Entire Subarnarekha basin covering Bihar, Orissa and West Bengal
- 2 Location :-
- (a) Latitude - 21° 35' - 23° 32' North
Longitude - 85° 8' - 87° 23' East
- (b) Agroclimatic region :- VII and III
- VII - The Eastern Plateau ^{Hill} Region
III - The lower Gangatic Plain Region
- 3 Total area :- 18,95,100 ha
- 4 Miscellaneous area under water body habitation, township stream, river etc 1,34,678 ha
- 5 Area under mapping units 17,60,422 ha
- 6 Base map :- Topographical map of Survey of India on 1:50,000 Scale
- 7 Period of Survey:- 12/86 - 5/89
- 8 Hydrological Sub-divisions:-
- (a) Catchment - Subarnarekha (S)
- (b) Subcatchments- 13 (Sa - - - - Sq)
- (c) Watersheds - 67
- (d) Subwatersheds- 705

- 9 ^{Area} Area extent of various Run - off Potential mapping units:-

Sl.NO.	Mapping Unit	Area (ha)	Percentage
1	2	3	4
1	A	1,01,531	5.8
2	B	6,11,723	34.7
3	C	2,65,062	15.1
4	D	2,49,022	14.1
5	E	53,145	3.0

1	2	3	4
6	F	24,684	1.4
7	G	26,416	1.5
8	H	2,76,970	15.7
9	J	1,414	0.1
10	K	33,162	1.9
11	L	5,594	0.3
12	M	2,060	0.1
13	P	78,941	4.5
14	Q	24,297	1.4
15	R	6,401	0.4
TOTAL	15	17,60,422	100.0

10 Gradaation of Subwatersheds into priority Categories :-

Sl.No.	Priority categories	No. of Subwatersheds	Area (ha)	Percent
1	2	3	4	5
1	Very High	73	2,00,307	11.4
2	High	193	4,97,370	28.3
3	Medium	358	8,73,279	49.6
4	Low	73	1,75,958	9.9
5	Very low	5	13,508	0.8
	TOTAL	702	17,60,422	100.0

11 Subcatchment wise status of priority sub-watersheds :-

Sl. No.	Sub - catchment	Priority grouping, Area (ha) & No. of subwatersheds					TOTAL
		Very High	High	Medium	Low	verylow	
1	Sa	16,287	37,063	91,512	22,112	2,063	1,69,010
		7	18	39	8	1	73
2	Sb	-	-	8,779	77,361	11,472	97,612
		-	-	5	29	4	38

III

Sl. No.	Sub - catchments	Priority grouping, Area (ha) & No. of Subwatersheds					TOTAL	
		Very High	High	Medium	Low	Very low		
3	Sc	1640 1	3827 2	78,829 38	27,051 12	-	1,11,347 53	
4	Sd	24153 12	50278 21	71,417 40	31,462 16	-	1,77,310 89	
5	Sf	5697 3	23,233 12	42,717 29	1243 2	-	72,890 46	
6	Sg	77614 19	1,61098 44	3,17,067 93	5,256 1	-	5,61,035 157	
7	Sh	7101 3	26,885 9	39,090 14	-	-	73026 26	
8	Sj	1910 1	14,906 9	12,957 7	-	-	29,773 17	
9	Sk	47399 18	37,058 16	68,353 31	9,702 4	-	1,62,512 69	
10	Sm	1480 1	55,765 29	35,526 19	-	-	92,771 49	
11	Sn	10,585 4	38,904 16	12,648 6	-	-	62,137 26	
12	Sp	6,441 4	48,353 19	25,286 11	-	-	80,080 34	
13	Sq	-	-	69,098 26	1,771 1	-	70,869 27	
TOTAL		Area	2,00,307	4,97,370	8,73,279	1,75,958	13,508	17,60,422
		NO	73	193	358	73	5	702
		Percent	11.4	28.3	49.6	9.9	0.8	100.0

12 State wise and districtwise distribution of priority Subwatersheds

Sl. NO.	State	District	Priority categories Area/No. of subwatersheds					TOTAL
			Very high	High	Medium	low	very low	
1	2	3	4	5	6	7	8	9
1	Bihar	Giridih	-	410	-	-	-	410
			-	1	-	-	-	1
		Hazaribagh	2971	8247	4422	-	-	15,640
			2	3	2	-	-	7
		Ranchi	58,963	147924	1,74200	4316	-	3,85403
	25	68	77	2	-	172		
		Singhbhum	1,12,135	235889	3,86278	33,740	-	7,68,042
			47	105	194	21	-	367
			1,74,069	3,92,470	5,64,900	38,056	-	11,69,495
			9.9%	22.3%	32.1%	2.1%	-	66.4 %
2	Orissa	Balasore	-	-	11,056	42,504	12,275	65,835
					6	19	4	29
		Mayurbhanj	9945	56,914	1,37,507	2,126	-	2,06,492
			5	21	50	1	-	77
					9945	56,914	1,48,563	44,630
			0.6 %	3.3%	8.4 %	2.5 %	0.7 %	15.5 %
3	West Bengal	Medinapur	3654	4587	1,20,647	93,272	1233	2,23,393
			4	5	51	41	1	102
		Puruliya	12639	43,399	39,169	-	-	95,207
			6	18	18	-	-	42
					16,293	47,936	1,59,816	93,272
			0.9%	2.7%	9.1%	5.3%	0.1%	18.1%
GRAND TOTAL	3	8	2,00,307	4,97,370	8,73,279	1,75,958	13,508	17,60,422
			11.4 %	28.3 %	49.6 %	9.9 %	0.8 %	100 %