

Report on Prioritization of Subwatersheds in (Kutku dam) Sone F.P.R. Catchment district Palamu and Ranchi of Bihar and Surguja of Madhya Pradesh.

ABSTRACT

1 Survey area : Sone F.P.R. Catchment (Kutku dam) district Palamu and Ranchi of Bihar and Surguja of Madhya Pradesh .

2 Location :

- a) Latitude - North $23^{\circ} 40'$ - $23^{\circ} 45'$
- b) Longitude - East $83^{\circ} 50'$ - $84^{\circ} 35'$
- c) District - Palamu and Ranchi of Bihar and Surguja of M.P.
- d) Agroclimatic zone - VII - The Eastern Plateau and Hill Region .

3 Total area : 2,33,856 ha.

4 Miscellaneous area : 13,383 ha.

5 Base map - Topographical map of Survey of India on 1:50,000 scale.

6 Period of Survey : April - June' 89

7 Hydrological Sub-division :

- 1) Catchment - 1 (Kutku)
- 2) Sub-catchment - 4 (ka - kd)
- 3) Watershed - 12
- 4) Subwatershed - 119

II

8) Areal extent of various run-off potential mapping units :

Sl.No.	Mapping unit	Area (ha)	Percentage
1	A	7599	3.2
2	B	7,199	3.1
3	C	13,322	5.7
4	D	314	0.1
5	E	6,147	2.6
6	F	2,103	0.9
7	G	36,696	15.7
8	H	1,27,574	54.6
9	K	8,863	3.8
10	L	10,653	4.5
	Total	2,20,473	94.2
	Misc.Area	13,383	5.8
	Total	2,33,856	100.0

III

9) Gradation of Subwatersheds into Priorities

Sl.No.	Priority Category	Range of R.P.I.	No. of Sub Area	Percentage Watershed
1	Very high	Above 80	33	62,458 26.7
2	High	71 - 80	77	1,43,643 61.4
3	Medium	61 - 70	7	12,618 5.4
4	Low	51 - 60	2	1,754 0.7
	Total		119	2,20,473 94.2
	Mis. area			13,383 5.8
	Total			2,33,856 100.0

10) Sub-catchment wise status of Priority subwatersheds :-

Sl.No.	Priority category	Subcatchment				Total
		Ka	Kb	Kc	Kd	
1	Very high	9 15,783	13 24,663	8 16,955	3 5,057	33 62,458
2	High	29 56,313	9 15,919	21 41,144	18 30,267	77 1,43,643
3	Medium	4 7,965	-	2 3,388	1 1265	7 12,618
4	Low	2 1754	-	-	-	2 1754
	Total	44 81,815 35.0%	22 40,582 17.3%	31 61,487 26.3%	22 36,589 15.6%	119 2,20,473 94.2%
	Misc. Area	-	-	-	-	13,383 (5.8%)
	Total					2,33,856 100.0%

11) Districtwise Status of priority subwatersheds :-

Sl.No.	Priority category		District & Area ha & %			Total
			Bihar		M.P.	
			Palamau	Ranchi	Surguja	
1	Very high	61751	36,816	24,935	707	62,458
			15.7	10.7	0.2	(26.7)
2	High	132496	71,111	61,385	11,147	1,43,643
			30.4	26.2	4.8	(61.4)
3	Medium	12576	8,611	3,965	42	12,618
			3.7	1.7	0.1	(5.4)
4	Low	1754	1754	-	-	1754
			0.7	-	-	(0.7)
Total		208577	1,18,292	90,285	11,896	2,20,473
			50.5	38.6	5.1	13,383
Misc. Area		13133	12506	627	250	13,383
			(5.4)	(0.3)	(0.1)	(5.8)
Total		221710	1,30,798	90,912	12146	2,33,856
			(55.9)	(38.9)	(5.2)	(100.0)