

REPORT ON DEMARCATION OF PRIORITY SUB-WATER SHEDS
IN THE CATCHMENT OF ALAKNANDA (UPPER GANGA)
ABOVE DEVPRAYAG, UTTAR PRADESH

A B S T R A C T

1. Survey area - Alakananda catchment above the confluence of Bhagirathi at Devprayag, Tehri Garhwal, Chamoli, Uttar Kashi district, U.P.
2. Location 78°-30' to 80°-15'E Longitude, 30°-5' to 31°-0'N Latitude.
3. Total area 11,16,725 ha.
4. Period of Survey 1984 - 1985
5. Type of Survey Rapid Reconnaissance Survey
6. Base Material Toposheets 1:50,000
7. Runoff potential mapping units and their extents.

S.No.	Run off Potential Mapping units	Area in ha.	Percentage
1.	H	225	0.1
2.	J	143175	12.8
3.	J1	43750	3.9
4.	J2	55800	5.0
5.	J3	57875	5.1
6.	J4	17325	1.5

S.No.	Runoff Potential Mapping units	Area in ha.	Percentage
7.	L	1925	0.2
8.	M	133225	11.9
9.	N	24275	2.2
10.	P	22275	2.0
11.	Q	13875	1.2
12.	R	367575	33.0
13.	S	47125	4.2
14.	S1	113950	10.2
15.	T	33200	3.0
16.	U	31950	2.8
17.	V	6000	0.5
18.	W	650	0.1
19.	River	2500	0.2
20.	Misc.	50	0.1
Total		1116725	100.0

8. Hydrologic Division:

(a) Catchment	Alaknanda (Upper Ganga)
(b) Sub-catchments	8 - Gc, Gd, Gf, Gg, Gh, Gj, G and Gm.
(c) Water sheds	43
(d) Sub-water sheds	381

9. Soil Erosion Hazard:

S.No.	Erosion class	Area in ha.	Percentage
1.	Slight	124850	11.2
2.	Moderate	171675	15.4
3.	Moderate to severe	123825	11.1
4.	Severe to Very Severe	693825	62.1
5.	Under Miscellaneous uses	2550	0.2
Total		1116725	100%

10. Priority Classification:

Priority category	Run of potential Index range	No. of sub-water sheds	Area in ha.	Percentage %
Very high	Above 70	48	84725	7.6
High	60 - 69	144	370375	33.2
Medium	50 - 59	175	587725	52.6
Low	40 - 49	14	73900	6.6
Very low	Below 40	-	-	-
		381	1116725	100%

11. Salient features:

1. Of the total area 84725 ha (7.6%), 370375 ha (33.2%) have been assessed as very high and high priority category respectively.
2. Of the total area, 1,20,150 (10.7%); 1,12,025 (10.0%); 3,67,575 (33.0%); 2,550 (0.3%) have been assessed as cultivated, grazing lands and grass lands, roctoul and under water and miscellaneous respectively.
3. Of the total area, 3,53,350 (31.6%) has been assessed as forest.
4. Of the total area, 2,95,500 ha (26.5%) 6,93,825 (62.1%) have been assessed as moderate to severe and severe to very severe eroded respectively.
5. Of the total area, 1,61,075 (14.4%) has been found to be permanent glaciers.