

REPORT ON THE DEMARCATION OF PRIORITY SUBWATERSHEDS IN THE CATCHMENT OF UPPER GANGA ABOVE RISHIKESH UP TO THE CONFLUENCE OF BHAGIRATHI AND ALAKNANDA RIVERS, UTTAR PRADESH.

A B S T R A C T

1. Surveyed area : Lower part of Upper Ganga Catchment (above Rishikesh) direct draining (Chandra bhaga) Hiyüni etc.) and Nayar subcatchment upto confluence of Bhagirathi and Alknanda rivers.
2. Total area : 3,11,800 ha.
3. Period of survey : May 82 to July 82.
4. Kind of Survey : Rapid reconnaissance
5. Extent of areas under different erosion intensity mapping units.

| Mapping unit | Area in ha.   | Percentage  |
|--------------|---------------|-------------|
| H            | 850           | 0.3         |
| J            | 86150         | 27.6        |
| J1           | 80225         | 25.7        |
| J2           | 31300         | 10.0        |
| J3           | 93675         | 30.1        |
| J4           | 16475         | 5.3         |
| K            | 1175          | 0.4         |
| L            | 1950          | 0.6         |
| <b>Total</b> | <b>311800</b> | <b>100%</b> |

6. (a) Catchment : Lower part of Upper Ganga catchment above Rishikesh, U.P.
- (b) Subcatchments : 2
- (c) Watersheds : 14
- (d) Subwatersheds : 145

7. Priority classification of subwatersheds :

| Priority class | No. of subwatersheds | Area in ha. | Percentage |
|----------------|----------------------|-------------|------------|
| Verh high      | 8                    | 14475       | 4.6        |
| High           | 57                   | 118975      | 38.2       |
| Medium         | 63                   | 134225      | 43.0       |
| Low            | 17                   | 44125       | 14.2       |
| Very low       | -                    | -           | -          |
| Total          | 145                  | 311800      | 100.0      |

8. Salient features :

- (a) Of the 3.11 lakh hectares catchment area of the Upper Ganga above Rishikesh only 133450 ha. (42.8%) area have been assessed as very high and high priority area.
- (b) The very high priority areas are concentrated in only Ga2, Ga6 and Ga4 watersheds.
- (c) The high priority areas are met with in all watersheds except the Ga7 and Ga8. Extensive high priority areas in decreasing extent occur in the following watersheds : Gb4, Ga3, Ga5, Ga2 and Ga6.
- (d) In land use, maximum area, 53.8%, is under forest followed by 36.3% under cultivation and 10% area under grassland.
- (e) Nearly 55.8% of the catchment area is under severe erosion and rest of the area is under moderate sheet and rill erosion.
- (f) About 98.7% of the catchment area falls between strong and very steep slopes with negligible areas under 1-5% (0.6%) and 3-15% (0.7%) slopes.
- (g) In soil depth, nearly 63.7% area is underlain by moderately deep to deep soils and about 10% area has very shallow to shallow soils. Remaining area is a mixed group of shallow and moderately deep soils.
- (h) Only 10.4% of the catchment area is well conserved. Major areas 84.3% is poorly conserved.