

Report on prioritization of Subwatersheds in Hb and Hc Subcatchments (Kelo and Ib rivers) of Hirakud R.V.P catchment, Raigarh and Surguja (Ambikapur) districts (Madhya Pradesh); Sambalpur, and Sundargarh districts (Orissa) & Ranchi district (Bihar)

Abstract

1. Survey area : Hb and Hc Subcatchments under Hirakud Catchment.
2. Location : $21^{\circ} 40'$ to $23^{\circ} 12'$ North Latitude and $83^{\circ} 15'$ to $84^{\circ} 12'$ East Longitude.
3. Total area : 7,33,271 ha.
4. (a) Type of Survey : Rapid reconnaissance Survey
(b) Period of Survey : June 1986 to March, 1987
5. Base map : Survey of India topographical maps, 1 : 50,000
6. Areal extent under different erosion intensity Units (ha)

| Mapping Units | Hb sub Catchment | Hc Subcatchment | Total area | Percentage of the area. |
|---------------|------------------|-----------------|------------|-------------------------|
| 1. | 2. | 3. | 4. | 5. |
| A | - | 644 | 644 | 0.1 |
| B | - | 23107 | 23107 | 3.2 |
| C | - | 37054 | 37054 | 5.1 |
| D | 46 | 6274 | 6320 | 0.9 |
| E. | 2442 | 31613 | 34055 | 4.7 |
| F | 93 | 40664 | 40757 | 5.6 |
| G | - | 43056 | 43056 | 5.9 |
| H | - | 2889 | 2889 | 0.4 |
| J | 78575 | - | 78575 | 10.6 |
| K | 55666 | - | 55666 | 7.6 |
| L | 46155 | - | 46155 | 6.3 |
| L1 | 34515 | - | 34515 | 4.7 |
| M | - | 11906 | 11906 | 1.6 |
| M1 | 4013 | - | 4013 | 0.5 |
| M2 | 18134 | 150 | 18284 | 2.5 |
| M3 | 3705 | - | 3705 | 0.5 |
| M4 | 18606 | - | 18606 | 2.5 |

| 1. | 2. | 3. | 4. | 5. |
|-------|----------|----------|----------|-------|
| N | - | 1058 | 1058 | 0.2 |
| N2 | - | 219 | 219 | 0.0 |
| P | - | 16778 | 16778 | 2.3 |
| R | - | 10924 | 10924 | 1.5 |
| S | - | 207 | 207 | 0.0 |
| T | 529 | 587 | 1116 | 0.2 |
| U | 9521 | 7683 | 17204 | 2.4 |
| u1 | 483 | - | 483 | 0.1 |
| v | 110777 | 372 | 111149 | 15.2 |
| v1 | 6997 | - | 6997 | 1.0 |
| w | 102240 | - | 102240 | 14.1 |
| Total | 4,92,497 | 2,35,185 | 7,27,682 | 100.0 |

1. Total area under sub watersheds - 7,27,682 ha
 2. Area submerged in Hirakud Reservoir - 2,277 ha.
 3. Area under river and Nala - 33 12 ha

Grand Total 7,33,271 ha

7. Hydrological sub-divisions:-

- (a) Catchment - H (Hirakud)
 (b) Sub-catchments - 2, Hb and Hc
 (c) Watersheds - 14
 (d) Subwatersheds - 230

8. Gradation of Subwatersheds into priority categories.

| Priority category | No of sub watersheds | Area | Percent |
|-------------------|----------------------|----------|---------|
| a- Very high | - | - | - |
| b- High | 4 | 11380 | 1.6 |
| c - Medium | 26 | 85436 | 11.7 |
| d- Low | 100 | 307299 | 42.2 |
| e- Very low | 100 | 323567 | 44.7 |
| Total | 230 | 7,27,682 | 100.0 |