

Report on Reprioritisation of Subwatersheds of Tilaya Dam, Barakar RVP Catchment (2A2E8 Watershed), Districts Hazaribag, Koderma and Chatra, Bihar

Abstract

1. **Survey Area** : Tilaya Dam Catchment, Barakar RVP, Districts Hazaribag, Koderma and Chatra of Bihar.
2. **Total Area Mapped** : 98,414 ha.
3. **Location** : 85⁰9' to 85⁰34' E Longitude and 24⁰5' to 24⁰28' N Latitude
4. **Agro Climatic Zone** : Middle Gangetic Plain, Eastern plateau and hills (Zone 4) as per planning Commission classification.
5. **Kind of Survey** : Rapid Reconnaissance Survey for demarcation of priority subwatersheds.
6. **Period of Survey** : December 1996 to June 1997
7. **Base maps Used** : Survey of India topographical maps(1:50,000)

8. Extent of Areas under Different Erosion Intensity Mapping Unit

Sl. No	Mapping Unit	Area (ha)	Percentage
1.	A1	908	0.92
2.	A2	10968	11.14
3.	A3	16772	17.04
4.	A4	1334	1.36
5.	C1	2474	2.51
6.	C3	230	0.23
7.	C5	995	1.01
8.	C6	609	0.62
9.	C7	194	0.20
10.	C8	92	0.09
11.	C9	312	0.32
12.	C10	2508	2.55
13.	C11	498	0.51
14.	C12	634	0.65
15.	C15	103	0.10
16.	GN1	10221	10.39
17.	GN2	24	0.02
18.	GN3	405	0.41
19.	GN4	16	0.02
20.	GN5	1090	1.11
21.	GN6	9922	10.08
22.	GN7	5983	6.08
23.	GN8	1370	1.39
24.	GN9	693	0.70
25.	GN10	17640	17.93
26.	GN11	1114	1.13
27.	GN12	4679	4.76
28.	GN13	1056	1.07
29.	H.S	669	0.68
30.	Reservoir	4441	4.51
31.	River	448	0.46
32.	Road	12	0.01
	Total	98414	100

9. Priority Categorisation

Sl. No	Priority Category	Range	No of Subwatersheds	Area (ha)	%
1.	Very High	1100 and above	-	-	-
2.	High	1000-1099	1	3055	3.1
3.	Medium	900-999	11	32655	33.2
4.	Low	800-899	11	29327	29.8
5.	Very Low	Below 800	13	33377	33.9
	Total		36	98414	100.0

10. Districtwise Distribution of Priority Categories

Sl. No	Priority Category & Range	Area (ha)				%
		Hazaribag	Koderma	Chatra	Total	
1.	Very High 1100 and Above	-	-	-	-	-
2.	High 1000-1099	3055	-	-	3055	3.1
3.	Medium 900-999	24302	6825	1528	32655	33.2
4.	Low 800-899	24362	-	4965	29327	29.8
5.	Very Low Below 800	2717	16730	13930	33377	33.9
	Total	54436	23555	20423	98414	100.00

Salient Features

- Out of total catchment area, 3055 ha (3.1%) covered by only one subwatershed comes under high priority and 32655 ha (33.2%) covered by 11 subwatersheds comes under medium priority.
- 13354ha, accounting for 13.6% of the whole catchment area has very steep land slope (> 33%) and 5313ha area (5.4%) has complex land slope (3-15%).
- Of the whole catchment, 24803 ha (24.5%) land suffer from moderate to severe erosion and 5313 ha (5.4%) land suffers from severe to very severe erosion hazard, which need appropriate soil and water conservation measures.
- 675 ha (0.7%) area of the catchment has inherent problem due to shallow to very shallow soil depth that demands proper land use planning.
- Soil over 8704 ha (8.8%) of the catchment area is poorly conserved where adequate soil and water conservation and integrated management are to be undertaken.