

**Report on Reprioritisation of Subwatersheds in 5C2 and 5C3
Catchment (Part) of Tapi Basin, (Ukai RVP Catchment), District Dhule
(Mah.), Khargon (M.P.), Bharuch & Surat (Gujarat)**

ABSTRACT

1. Surveyed area: 5C2 and 5C3 Catchment (Part) of Tapi Basin
2. Base material: Survey of India, Topographic maps (1:50,000 scale)
3. Location: 20⁰-57' to 21⁰-50' N Latitudes
73⁰-33' to 73⁰-58' E Longitudes
4. Total area: 7,82,672 ha
5. Type of survey: Rapid Reconnaissance Survey for identification and Demarcation of priority subwatersheds.
6. Period of survey: April 1996 to March 1997.
7. Extent of area under different erosion intensity mapping units:

S. No.	Mapping Units	Area (ha)	Percentage
1.	A1	17137	2.3
2.	A2	108941	14.8
3.	A3	69385	9.4
4.	B1	31893	4.3
5.	B2	58620	8.0
6.	B3	73185	10.0
7.	B4	19036	2.6
8.	B5	26964	3.7
9.	B6	10400	1.4
10.	B7	34678	4.7
11.	B8	47484	6.4
12.	B9	61743	8.4
13.	B10	54403	7.4
14.	B11	88979	12.1
15.	B12	19642	2.7
16.	B13	11725	1.6
17.	B14	1250	0.2
	Total	735465	100.0
	River, Nalla, Hab. & others	6,271	
	Area under submergence	40,936	
	Grand Total	7,82,672	

8. Hydrological sub-division: 5C2A1a

Where,

5	-	Region
C	-	Basin
2	-	Catchment
A	-	Subcatchment
1	-	Watershed
a	-	Subwatershed

9. Gradation of Priority Subwatersheds:

S. No.	Priority Category	Sediment Yield Index range	No of. Subwatersheds	Area (ha)	Percent
1.	Very high	1500 and above	37	1,10,780	14.9
2.	High	1400 -1499	41	1,21,890	16.4
3.	Medium	1300-1399	33	89,438	12.1
4.	Low	1200-1299	35	1,12,282	15.1
5.	Very Low	Below 1200	139	3,07,346	41.5
		Total	285	7,41,736	100.0

10. Distribution of area under different priority categories in Dhule (Mah.):

S. No.	Priority Category	Sediment Yield Index range	No of. Subwatersheds	Area (ha)	Percent
1.	Very high	1500 and above	18	59,915	10.6
2.	High	1400 -1499	33	1,06,253	18.8
3.	Medium	1300-1399	27	73,646	13.0
4.	Low	1200-1299	28	91,604	16.1
5.	Very Low	Below 1200	104	2,35,223	41.5
		Total	210	5,66,641	100.0

11. Distribution of area under different priority categories in Khargon (M.P.):

S. No.	Priority Category	Sediment Yield Index range	No of. Subwatersheds	Area (ha)	Percent
1.	Very high	1500 and above	10	31,003	63.2
2.	High	1400 -1499	3	6,724	13.7
3.	Medium	1300-1399	2	5,884	12.0
4.	Low	1200-1299	Nil	-	-
5.	Very Low	Below 1200	3	5,452	11.1
		Total	18	49,063	100.0

12. Distribution of area under different priority categories in Bharuch (Gujarat)

S. No.	Priority Category	Sediment Yield Index range	No of. Subwatersheds	Area (ha)	Percent
1.	Very high	1500 and above	2	7,362	19.2
2.	High	1400 -1499	-	-	-
3.	Medium	1300-1399	5	10,388	27.1
4.	Low	1200-1299	2	6,537	17.0
5.	Very Low	Below 1200	8	14,112	36.7
		Total	17	38,399	100.0

13. Distribution of area under different priority categories in Surat (Gujarat)

S. No.	Priority Category	Sediment Yield Index range	No of. Subwatersheds	Area (ha)	Percent
1.	Very high	1500 and above	7	12,500	14.3
2.	High	1400 -1499	5	8,913	10.2
3.	Medium	1300-1399	1	3,792	4.3
4.	Low	1200-1299	4	11,869	13.5
5.	Very Low	Below 1200	24	50,559	57.7
		Total	41	87,633	100.0

14. Salient features:

- 37 Subwatersheds with an area of 110780 ha (14.9%) fall under very high priority and 41 Subwatersheds with an area of 121890 ha (16.4%) fall under high priority. The area may be taken up for soil and water conservation planning.
- Out of the total area, 283424 ha (38.5%) suffers from severe erosion 169606 ha (23.1%) suffers from moderate to severe erosion, 67378 ha (9.2 %) suffers from moderate erosion and 215057 ha (29.2%) suffers from slight erosion.
- Out of the total area, 254776 ha (34.7%) is covered by very shallow to shallow gravelly soils and 158981 ha (21.6 %) area is covered with shallow to moderately deep soils. The remaining area is covered by moderately deep to very deep soils.
- About 195463 ha i.e. 25.0 % of the total area is covered with alluvial soils and remaining area is covered with insitu soils developed over basalt parent material.
- About 193076 ha i.e. 26.3% of total area is under open scrub and thin forest cover. This area should be utilised for plantation of climatically adapted plant species.
- About 112334 ha (15.3%) area is under degraded forest that needs attention of planners and executives.