

REPORT ON PRIORITIZATION OF SUBWATERSHEDS IN 5H3 (SARASWATI RIVER)
CATCHMENT, PART OF DISTRICTS BANASKANTHA, KUTCH AND MEHSANA,
GUJARAT STATE.

ABSTRACT

1. Survey area : Saraswati River (Non R.V.P) Sub-Catchment
5H3B5, B6, B7, B8 Watersheds.
2. Location : N. Latitude 23°- 28' to 24°-20'
E. Longitude 71° -23' to 72°- 50'
3. Agroclimatic Region : 13 (Gujarat plains and hill region)
4. Total Surveyed area : 2,58,932 ha.
5. Type of Survey : Rapid Reconnaissance survey for Priority
Delineation.
6. Period of Survey : November 1998 to March 1999.
7. Base Material : Survey of India topographical maps of
1 : 50,000 scale

8. Geographical extent of different erosion intensity mapping units.

Sr.No.	Mapping Units	Weightage Value	Delivery Ratio	Area in ha.	% of the Total Area
1.	A1	11	0.53	38016	14.7
2.	A2	14	0.60	2283	0.9
3.	A3	14	0.62	3928	1.5
4.	A4	18	0.72	1462	0.6
5.	A5	12	0.57	11775	4.5
6.	A6	12	0.56	18123	7.0
7.	A7	15	0.63	47331	18.3
8.	A8	12	0.56	4510	1.7
9.	CA	12	0.56	17255	6.7
10.	C1	13	0.75	1112	0.4
11.	C2	18	0.86	2018	0.8
12.	E1	15	0.63	21000	8.1
13.	E2	13	0.59	7208	2.8
14.	E3	11	0.54	2768	1.1
15.	E4	17	0.69	5036	1.9
16.	E5	12	0.54	44298	17.1
17.	G1	13	0.74	1025	0.4
18.	G2	16	0.84	11487	4.4
19.	G3	12	0.64	1157	0.4
20.	G4	17	0.69	1749	0.7
21.	G5	13	0.58	4402	1.7
TOTAL				2,47,943	95.7
Misc. (Streams, Waterbodies & Habitation)				10989	4.3
GRAND TOTAL				2,58,932	100.0

9. Hydrological Divisions :

Subcatchment - 5H3B (Saraswati River Subcatchment)

Watersheds - 04

Subwatersheds - 81

Sr.No.	Subwatershed Code	No. of Sub-Watersheds	Area in ha.
1.	5H3B5 a to x	20	88877
2.	5H3B6 a to p	12	34400
3.	5H3B7 a to t	31	86909
4.	5H3B8 a to v	18	48746
TOTAL		81	2,58,932

10. Grading of Priority Subwatersheds :

Priority Categories Grading	Sediment Yield Index	No. of Sub-watersheds	Area in ha.	Percentage %
Very High	1200 and above	2	4978	1.9
High	1100-1199	2	7082	2.7
Medium	1000-1099	2	4701	1.8
Low	900-999	9	21883	8.5
Very Low	below 900	66	209299	80.8
TOTAL		81	2,47,943	95.7
MISC.		-	10,989	4.3
GRAND TOTAL		81	2,58,932	100.0

Salient Features :

An area of about 12060 ha. (4.6 %) falls under very high and high priority categories out of the surveyed area.

About 6.4% area is hilly and have shallow to very shallow loamy skeletal soils.

Around 8.4% area suffers from moderate to strong salinity/alkalinity problem and needs reclamation measures.

About 2.5% of the surveyed area suffers from severe to very severe gully erosion and needs immediate attention.