

REPORT ON PRIORITIZATION OF 5G2 CATCHMENT (SHETRUNJI SUB-CATCHMENT NON RVP), AMRELI, BHAVNAGAR AND JUNAGARH, DISTRICT OF GUJARAT STATE.

ABSTRACT

1. Survey Area Part of 5G2 catchment, (Shetrunji Sub-catchment Non RVP), Amreli, Bhavnagar and Junagarh, Districts (Gujarat State)
2. Location a) Latitude - $21^{\circ}5' N$ to $21^{\circ}50' N$
b) Longitude - $69^{\circ}50' E$ to $72^{\circ}10' E$
3. Agroclimatic zone 13
4. Total area surveyed 6,20,667 ha
5. Type of survey Priority Demarcation survey
6. Period of survey December 1996 to June 1998
7. Base map used 1: 50,000 Topographical maps of Survey of India
8. Hydrological Sub-divisions a) Catchment - Southern 5G2 Kathiawad
b) Subcatchment Shetrunji 5G2B
c) Watersheds 5G2B1 - 6
d) Subwatersheds - 170

9. Priority Categorization :-

S.No.	Priority Category	Sediment Yield Index Range	Number of sub-watersheds.	Area in ha	Percentage
1.	Very High	1200 and above	16	55627	9.0
2.	High	1100 - 1199	31	107323	17.3
3.	Medium	1000 - 1099	79	298846	48.1
4.	Low	900 - 999	35	124278	20.0
5.	Very Low	Below - 900	9	34593	5.6
Total			170	620667	100.0

10. Extent of Erosion intensity mapping units

S.No.	EIMU	Area in ha	Percentage
1.	B1	3396	0.55
2.	B2	22393	3.61
3.	B3	31042	5.00
4.	B4	12532	2.02
5.	B5	4171	0.67
6.	B6	120290	19.38
7.	B7	125461	20.21
8.	B8	37983	6.12
9.	B9	18248	2.94
10.	B12	52489	8.46
11.	B13	79433	12.80
12.	B14	21587	3.48
13.	B15	4971	0.80
14.	B16	15046	2.42
15.	B17	14960	2.41
16.	RA	11226	1.81
17.	CA1	73	0.01
18.	CA2	2316	0.37
19.	CA3	4098	0.66
20.	CA4	1012	0.16
21.	CA5	11419	1.85
22.	CA6	5413	0.87
23.	CA7	885	0.14
24.	CA8	7174	0.16
	Misc	13049	2.10
	Total	620667	100.00

11. Watershed wise status of Priority of subwatersheds.

S.No.	Watershed No.	No of sub-watersheds	Priority groupings				Very Low
			Very High	High	Medium	Low	
1.	5G2B1	16	1	1	8	2	4
2.	5G2B2	43	7	11	19	1	5
3.	5G2B3	23	-	-	16	7	-
4.	5G2B4	20	2	3	14	1	-
5.	5G2B5	37	2	9	10	16	-
6.	5G2B6	31	4	7	12	8	-
Total		170	16	31	79	35	9

12. Salient features of the surveyed area :-

1. Very high and high category of priority of subwatersheds covering 162950 ha (26.3%) of the total area needs immediate treatment measures.
2. Medium category of priority of subwatersheds accounts for 298846 ha (48.1%) of the total area. The subwatersheds adjacent to them very high and high priority categories should also be taken into account to check the soil erosion.
3. Very shallow to shallow soils covers 74334 ha. area comprising 12% of total surveyed area.
4. About 75089 ha area suffers from severe erosion out of total surveyed area comprising 12% where as severe to very severe erosion covers 12111 ha, accounting 2% of the total surveyed area.
5. Cultivated area covers 45230 ha which is about 73% of the total area.
6. Forest covers an area of 80632 ha (12.99%) of total area.
7. Pastures and grass land cover 74956 ha area which is about 12.07% of total area.