

**REPORT ON PRIORITIZATION OF MICROWATERSHEDS IN 5H3A - KADI SUB-CATCHMENT (NON RVP), DISTRICTS AHMEDABAD,GANDHINAGAR, MEHSANA AND SURENDRANAGAR; GUJARAT.**

**A B S T R A C T**

1. Survey area : 5H3A1, 5H3A2 & 5H3A3 watersheds, Kadi Sub-catchment (Non RVP).
2. Location : 22° - 39' to 23° - 47' N Latitude  
71° - 21' to 72° - 43' E Longitude
3. Total Surveyed Area : 4,05,824 ha
4. Type of Survey : Priority Delineation Survey
5. Period of Survey : November, 2000 to June, 2001.
6. Base map used : Survey of India topographical maps  
1 : 50,000.

**7. Geographical extent of different Erosion Intensity Mapping Units**

S.No.	Mapping units	Weightage value	Delivery ratio	Area in ha	Percentage
<b>A- ALLUVIAL LANDSCAPE</b>					
1.	A1	12	0.56	1,97,167	48.6
2.	A2	13	0.59	12,130	3.0
3.	A3	12	0.57	7,913	1.9
4.	A4	13	0.59	1,04,003	25.6
5.	A5	14	0.61	727	0.2
6.	A6	14	0.60	41,845	10.3
<b>E- AEOLIAN LANDSCAPE</b>					
7.	E1	12	0.56	3,161	0.8
8.	E2	14	0.63	2,053	0.5
9.	E3	13	0.61	516	0.1
10.	E4	12	0.56	125	0.1
<b>S- ALLUVIO-COLLUVIAL LANDSCAPE</b>					
11.	S1	13	0.57	26,947	6.6
12.	S2	13	0.58	4,477	1.1
Sub-total				4,01,064	98.8
Misc. (Stream, water bodies & habitation )				4,760	1.2
Grand Total				4,05,824	100.0

- 8. Hydrological Division** : (a) Sub catchment - 5H3A (Kadi Subcatchment)  
 (b) Watersheds - 3  
 (c) Microwatersheds - 334

S.No.	Watershed code	No. of Microwatersheds	Area in ha
1.	5H3A1	78	75,961
2.	5H3A2	83	1,05,831
3.	5H3A3	173	2,24,032
<b>Total</b>		<b>334</b>	<b>4,05,824</b>

**9. Priority Categorisation**

S.No.	Priority category	SYI range	No. of Micro-watershed	Area in ha	Percentage
1.	Very high	1300 & above	Nil	-	-
2.	High	1200-1299	Nil	-	-
3.	Medium	1100-1199	Nil	-	-
4.	Low	1000-1099	Nil	-	-
5.	Very low	Below 1000	334	4,01,064	98.8
<b>Sub total</b>				<b>4,01,064</b>	<b>98.8</b>
Misc				4,763	1.2
<b>Grand Total</b>				<b>4,05,824</b>	<b>100.0</b>

**10. District and Taluka wise distribution of area under different watersheds of 5H3A, Kadi Sub-catchment.**

S.No	District/Taluka	W A T E R S H E D S			Total
		5H3A1	5H3A2	5H3A3	
<b>I</b>	<b>Ahmedabad</b>				
	1. Viramgam	1,495	52,239	43,693	97,427
	2. Sanand	-	-	34,188	34,188
	3. Daskroi	-	-	766	766
	<b>Total</b>	<b>1,495</b>	<b>52,239</b>	<b>78,647</b>	<b>1,32,381</b>
<b>II</b>	<b>Mehsana</b>				
	4. Mehsana	-	19,338	14,818	33,004
	5. Kheralu	-	4,043	-	4,043
	6. Visnagar	-	12,186	234	12,420
	7. Vijapur	-	9,088	12,709	21,797
	8. Kadi	-	8,937	78,614	87,194
	9. Kalol	-	-	34,084	34,084
	<b>Total</b>	<b>-</b>	<b>53,592</b>	<b>1,40,459</b>	<b>1,94,051</b>
<b>III</b>	<b>Surendranagar</b>				
	10. Lakhtar	40,961	-	940	41,901
	11. Limbdi	985	-	-	985
	12. Wadhwan	8,815	-	-	8,815
	13. Dhrangadhra	4,865	-	-	4,865
	14. Muli	12,319	-	-	12,319
	15. Dasada	6,521	-	706	7,227
	<b>Total</b>	<b>74,466</b>	<b>-</b>	<b>1,646</b>	<b>76,112</b>
<b>IV</b>	<b>Gandhinagar</b>				
	16. Gandhinagar	-	-	3,280	3,280
	<b>Total</b>	<b>-</b>	<b>-</b>	<b>3,280</b>	<b>3,280</b>
	<b>Grand total</b>	<b>75,961</b>	<b>1,05,831</b>	<b>2,24,032</b>	<b>4,05,824</b>

**Salient features of the surveyed area:-**

- All the microwatersheds surveyed under this report cover an area of 4,05,824 ha falling under very low priority category.
- Deep to very deep soils covers 4,01,064 ha area which is 98.8% of the total surveyed area.
- Nearly level to very gently sloping area accounts for 3,95,334 ha (97.4%) of the reported area.
- Gently to moderately sloping area covers 5,730 ha (1.4%) of the total area.
- None to slight erosion class occupies 3,48,344 ha (85.9%) of the reported area.