

# REPORT ON PRIORITIZATION OF MICROWATERSHEDS IN 6A2A1 WATERSHEDS OF LUNI SUBCATCHMENT (NON RVP) DISTRICTS BANASKANTHA & KUTCH (GUJARAT) AND JALOR & BARMER (RAJASTHAN)

## ABSTRACT

1. Survey Area : Microwatersheds in 6A2A1 Watersheds of Luni subcatchment (Non RVP) Districts Banaskantha & Kutch (Gujarat) and Jalor & Barmer (Rajasthan).
2. Location : a) Latitude 24° 33' to 24° 59' N.  
b) Longitude 71° 06' to 71° 55' E.
3. Agro climatic zone : 13 (Gujarat plains and hill region).
4. Total Area Surveyed : 1,39,156 ha.
5. Type of Survey : Rapid Reconnaissance Survey for Prioritization of Microwatersheds for soil conservation work.
6. Period of Survey : February, 2008 to March, 2008.
7. Base Map used : Survey of India Topographical Maps of 1:50,000 scale.
8. Hydrological Sub division : a) Region - '6' Ephemeral Drainage of Western Rajasthan  
b) Basin - '6A' Luni River  
c) Catchment - '6A2'.  
d) Sub-Catchment - 6A2A (Luni Subcatchment).  
e) Watersheds - 1  
f) Subwatersheds -20  
g) Microwatersheds - 128

### 9. Run-off Potential Mapping Units and their Extent:

Sl. No.	EIMU	Runoff Potential Value	Area in ha.	Area (%)
1	A01	58	15135	10.88%
2	A02	55	8866	6.37%
3	A03	55	17735	12.74%
4	A04	56	1022	0.73%
5	A05	60	346	0.25%
6	CA01	54	15846	11.39%
7	CA02	58	21077	15.15%
8	AE01	66	10417	7.49%
9	AE02	56	6286	4.52%
10	AE03	57	33404	24.00%
11	AE04	56	2847	2.05%
12	AE05	57	3794	2.73%
13	AE06	56	258	0.19%
14	AE07	54	764	0.55%
15	Misc.	-	1359	0.98%
Grand Total			139156	100.00

### 10. State wise Distribution of Area (ha) of Priority of Micro-watersheds

S. No.	State	High	Medium	Low	TOTAL
1	Gujarat	-	22094	3039	25133
2	Rajasthan	4139	88582	21302	114023
Grand Total		4139	110676	24341	139156

## 11. District wise Area (ha) under Different Priority Categories

Priority Categories	No Of MWS	TOTAL AREA	% AREA	Banas Kantha	Barmer	Jalor	Kutchh
High (61-65)	4	4139	2.97	-	-	4139	-
Medium (56-60)	100	110676	79.53	9675	2928	85654	12419
Low (51-55)	24	24341	17.49	2238	-	21302	801
TOTAL	128	139156	100.0	11913	2928	111095	13220

## 12. Salient Features of the Surveyed Area:

1. 4,139 ha (3.01%) of the total area falls under high priority category.
2. Physiographically, dominant land forms are aeolian plain and dunes 57,770 ha (41.5%), followed by alluvial plain 43,104 ha (31.0%), coastal alluvial plain 36,923 ha (26.5%), and miscellaneous land with area of 1,359 ha (1.0%).
3. Medium priority category microwatersheds account for 1,10,676 ha (79.53%) of the total area surveyed. The microwatersheds of this category adjacent to high priority category may also be taken into account while adopting soil conservation measures to check soil erosion.
4. About 10,763 ha (7.7%) of the total area suffers from severe erosion hazards.
5. Cultivated area comprising rainfed and irrigated covers 68,089 ha (48.9%) of the total reported area.
6. Area under forest covers 1,280 ha (0.9%).
7. Open scrub land with less than 10% canopy cover and uncultivable waste land occupy 31,505 ha (22.6%) and 36,923 ha (26.5%), respectively.
8. Priority area under high priority category of 4139 ha falls only in Jalor district of Rajasthan covering 4 microwatersheds.