

Report on detailed soil and land use survey of Mb4a, Mb4b Mb4c and Mb4d Sub watersheds of Mahi catchment, Taluka-Santrampur, District Panchmahal (Gujarat).

I ABSTRACT

1. Survey area: very high and high priority sub watersheds Mb4a, Mb4c and Mb4d, Mahi catchment, Taluka Santrampur, District Panchmahal (Gujarat).
2. Total area reported and mapped : 8467 ha.
3. a) Kind of survey : Detailed survey
b) Period of survey : November 1979 to March 1980.
- 4 a) Soil series mapped and area covered by each series in ha.

S.No.	Soil Series	Area in ha	Percentage
1.	Batakwada ✓	340 ✓	4.0
2.	Dunger ✓	576 ✓	6.8
3.	Galalpurā ✓	444 ✓	5.2
4.	Jher ✓	3,450 ✓	40.8
5.	Karodia ✓	390 ✓	4.6
6.	Navagarah ✓	268 ✓	3.2
7.	Simaliya ✓	838 ✓	7.6
8.	Valunda ✓	261 ✓	3.0
9.	Wadwas ✓	1,766 ✓	20.8
10.	Miscellaneous lands	334	4.0
Total		8,467	100.0

- 4 b) Area under different erosion phases:

S.No.	Erosion	Area in ha	Percentage
1.	Slight	819	9.7
2.	Moderate	1,808	21.3
3.	Severe	5,506	65.0
4.	Miscellaneous land	334	4.0

5. Soil and Land capability classification:

S.No.	Land capability	Area in ha	%	Name of soil series
1.	II-1	729	8.6	Batakawada, Dungar, Navagarah and valunda.
2.	IIe-1	851	10.0	Batakawada, Dungar Simalia and valunda.
3.	IIw-1	90	1.0	Batakawada and Dungar.
4.	IIIe-1	413	4.9	Simaliya
5.	IIIes-1	720	8.5	Galalpura and Wadwas
6.	IIIes-2	1227	14.5	Galalpura and Wadwas
7.	IVes-1	263	3.1	Galalpura and Wadwas
8.	VIes-1	1011	12.0	Jher and Karodiya
9.	VIIes-1	2829	33.4	Jher and Karodiya
10.	Miscellaneous	334	4.0	-
Total		8467	100.0	

6. Salient features:

- Nearly 50.6% area is cultivable, out of which 26.0% area have major limitations. 45.4% area is suitable only for forestry and pasture.
- Nearly 9.7% area is under slight erosion/under moderate erosion and 65.0% area is under severe erosion and needs soil conservation measures.
- About 71.4% area is under very shallow to shallow and moderately deep soil and needs special soil and water conservation.
- About 45.5% of the area is under moderate to steep slopes and have high runoff potential.
- About 7.4% area have gravelly sandy loam type of soil.