

DETAILED SOIL SURVEY AND LAND USE OF Ma3j, Ma3n Mb2m and Mc3b  
SUB-WATERSHEDS OF SAHIBI (FPR) CATCHMENT, BANSUR, KISHANGARH,  
MUNDAWAR AND TIZARA TEHSILS, ALWAR DISTRICT, RAJASTHAN

ABSTRACT

1. SURVEYED AREA : Ma3j, Ma3n, Mb2m and Mc3b sub-watersheds, Sahibi(FPR) Catchment.
2. a. Geographical Latitudes - 27° 43' to 27° 53'  
extent Longitudes - 76° 20' to 76° 47'
- b. Agroclimatic North Western Semi Arid and Arid zones (6)  
zone
- c. Total area 12,770 hectares
3. Type of survey Detailed Soil Survey
4. Period of survey November, 1992 to April, 1993+
5. Extent of series mapped under different sub-watersheds

S. No.	Name of Soil Series	Area (ha) under				Total area	Percentage
		Ma3j	Ma3n	Mb2m	Mc3b		
1.	Baliawas	3903	3919	977	442	9241	72.37
2.	Badgujar	35	-	-	-	35	0.27
3.	Chhapra	31	87	-	-	118	0.92
4.	Kakrala	31	29	-	46	106	0.83
5.	Roopwas	465	1331	640	230	2666	20.88
6.	Sairowan	-	29	-	-	29	0.23
7.	Ravinous land	79	47	-	144	270	2.11
8.	Misc.	103	56	46	100	305	2.39
Total		4647	5498	1663	962	12770	100.00

6. Distribution of Land Capability units under different soil series

S. Land No capability Units	BALI- AWAS	BADGU- JAR	CHHA- PRA	KAK- RALA	ROOPWAS	SAIROWAN	TOTAL	PERCENTAGE
1. II - 1	-	-	-	-	-	29	29	0.25
2. II S-1	1691	-	31	-	-	-	1722	14.12
3. IIes-1	4140	-	69	-	-	-	4209	34.51
4. IIIe-1	-	14	-	-	-	-	14	0.11
5. IIIe-2	2627	21	-	-	-	-	2648	21.72
6. IIIe-2	-	-	-	14	-	-	14	0.11
7. IVes-1	783	-	18	92	-	-	893	7.32
8. F1	-	-	-	-	2666	-	2666	21.86
Total	9241	35	118	106	2666	29	12195	100.00

7. Sub-watershedwise distreibution of different land capability unit

Land Capability unit	Sub-watersheds with area in hac.				Total
	Ma3j	Ma3n	Mb2m	Mc3b	
II - 1	29				29
IIes - 1	368	964	342	48	1722
IIes - I	886	2819	337	167	4209
IIIe-1	14	-	-	-	14
IIIe - 2	2480	145	23		2648
IIIes - 2	4	10			14
IVes - 1	248	97	275	273	893
F1	465	1331	640	230	2666
Grand Total					12,195

Erosion Inventory

S. Erosion classes No.	Area under different sub watershed (ha)				Total area %	Soil series
	Ma3j	Ma3n	Mb2m	Mc3b		
	Ma3j in	Ma3n in	Mb2m	Mc3b		
	involved					
1. Noneto Slight (e1)	368	993	342	48	1751(13.7)	Baliawas Sairowan
2. Moderate (e2)	3364	2974	360	213	6911(54.1)	Baliawas, Badgujar, Chhapra, Kakrala
3. Severe (e3)	733	1428	915	457	3533(27.7)	Baliawas, Badgujar Chhapra, Kakrala, Roopwas
4. Ravinous land	79	47		144	270(2.1)	
5. Miscellaneous	103	56	46	100	305(2.4)	
TOTAL	4647	5498	1663	962	12,770(100%)	

8. Salient features :

An area of 9529 hac (74.6%) is suitable for agriculture.

An area of 270 hac (2.1%) is under (Ravinous) land.

An area of 2666 hac (20.28%) is under Forest land, as such "Forest management" should form an important part of the watershed management programme.

About 6911 hac (54.1%) land of surveyed area is suffering from moderate, and 3533 hac (27.7%) from severe erosion problems.